

Appendix D

Air Quality, Greenhouse Gas Emissions,
and Energy Calculations

AIR QUALITY AND GREENHOUSE GAS EMISSIONS CALCULATIONS

AIR QUALITY EMISSIONS CALCULATIONS

1.0 INTRODUCTION

The following analyses were performed to evaluate the potential for impacts to air quality and greenhouse gas (GHG) emissions from the construction and operation of the Manning 500/230 Kilovolt (kV) Substation Project (Proposed Project). Daily and annual emissions for the following criteria air pollutants and greenhouse gases (GHGs) from the construction and operation and maintenance (O&M) phases of the Proposed Project were calculated:

- Volatile organic compounds (VOCs),
- Carbon monoxide (CO),
- Nitrogen oxides (NO_x),
- Sulfur oxides (SO_x),
- Particulate matter (PM) less than 10 microns in diameter (PM₁₀),
- PM less than 2.5 microns in diameter (PM_{2.5}),
- Carbon dioxide (CO₂),
- Methane (CH₄), and
- Sulfur hexafluoride (SF₆).

The emission sources considered and the calculation methodology for each of these sources are described in the sections that follow.

1.1 EMISSION CALCULATION METHODS

Emissions were calculated for the following sources for the construction phase of the Proposed Project:

- Exhaust emissions from off-road equipment use,
- Exhaust emissions from on-road vehicle travel,
- Entrained road dust emissions from on-road vehicle travel,
- Fugitive dust emissions from earthwork activities, and
- Exhaust and dust emissions from helicopter use.

Emissions were calculated for the following sources for the O&M phase of the Proposed Project:

- Exhaust emissions from on-road vehicle travel,
- Entrained road dust emissions from on-road vehicle travel,
- Electricity consumption at the proposed LS Power Grid California, LLC (LSPGC) Manning Substation, and
- Fugitive SF₆ losses at the proposed LSPGC Manning Substation.

Emissions calculation methods for each of the aforementioned sources are described in the subsections that follow. Additional conversion factors (e.g., grams to pounds) were added, as appropriate, to ensure proper units were used. These conversion factors may not be represented in the equations that follow.

1.1.0 Off-Road Equipment Exhaust

Exhaust emissions from off-road equipment use were calculated using the following equation:

$$E_{i,j} = EF_{i,j} \times LF_j \times H_j \times N_j$$

Where:

$E_{i,j}$ = Emissions of pollutant i from equipment type j (pounds/day)

$EF_{i,j}$ = Emission factor for pollutant i from equipment type j (pounds/operating hour)

LF_j = Load factor for equipment type j

H_j = Daily operating time for equipment type j (hours/day)

N_j = Number of pieces of equipment of type j

The emission factors used for the uncontrolled emissions calculations were obtained from Table G-11 of Appendix G: Default Data Tables of the California Emissions Estimator Model (CalEEMod) version 2022.1 User Guide (CalEEMod Guide). The lookup tables provided in the CalEEMod Guide were used to identify emission factors for each piece of equipment that would be used for the Proposed Project. Load factors were obtained from Table G-12 from Appendix G of the CalEEMod Guide.

The United States (U.S.) Environmental Protection Agency's (EPA's) Tier 4 final specifications were obtained from Table G-13 of the CalEEMod Guide and utilized to estimate controlled emissions with the incorporation of applicant-proposed measure (APM) AIR-1, which would require at least 75 percent of construction equipment with a rating between 100 and 750 horsepower (hp) to comply with U.S. EPA Tier 4 non-road engine standards. To estimate the effectiveness of APM AIR-1, off-road emissions for each phase of construction assuming all equipment between 100 and 750 hp included a U.S. EPA Tier 4 engine. The difference between this scenario and the uncontrolled scenario was calculated, and 75 percent of this change was applied to calculate the controlled emissions.

1.1.1 On-Road Vehicle Exhaust

Exhaust emissions from on-road vehicle use were calculated using the following equation:

$$E_{i,j} = EF_{mile,i,j} \times VMT_j \times N_j + EF_{trip,i,j} \times Daily\ Trips_j \times N_j$$

Where:

$E_{i,j}$ = Emissions of pollutant i from motor vehicle type j (pounds/day)

$EF_{mile,i,j}$ = Per mile emission factor for pollutant i from motor vehicle type j (pounds/mile)

VMT_j = Daily vehicle-miles-traveled (VMT) for motor vehicle type j (miles/day)

$EF_{trip_{i,j}}$ = Per trip emission factor for pollutant i from motor vehicle type j (pounds/day)

$Daily\ Trips_j$ = Number of daily trips for motor vehicle type j

N_j = Number of motor vehicles of type j

The emission factors were obtained from the California Air Resources Board's EMFAC Model.

1.1.2 On-Road Vehicle Entrained Dust

Entrained road dust emissions for paved and unpaved roads were calculated using the following equation:

$$E_{i,j} = EF_{i,j} \times VMT_j \times N_j$$

Where:

$E_{i,j}$ = Emissions of pollutant i from motor vehicle type j (pounds/day)

$EF_{i,j}$ = Emission factor for pollutant i from motor vehicle type j (pounds/mile)

VMT_j = Daily vehicle-miles-traveled (VMT) for motor vehicle type j (miles/day)

N_j = Number of motor vehicles of type j

The emission factors used for this calculation were calculated using the methods identified in Section 5.1.4 Road Dust Screen from the CalEEMod Guide. Paved emission factors were determined using the following equation:

$$EF_{paved_i} = [k_i \times (sL)^{0.91} \times (W)^{1.02}] \times \left(1 - \frac{P}{4N}\right)$$

Where:

EF_{paved_i} = paved road dust emission factor for pollutant i (g/mile)

k_i = particle size multiplier for pollutant i (grams/VMT) (the U.S. EPA's AP-42 default values are 0.2 for PM_{2.5} and 1.0 for PM₁₀)

sL = road surface silt loading (grams/meter²) (the U.S. EPA's AP-42 default value is 0.1)

W = average weight (short tons) of all vehicles traveling on the road (the statewide default is 2.4)

P = number of "wet" days with at least 0.01 inch of precipitation

N = number of days in the averaging period

Unpaved emission factors were determined using the following equation:

$$EF_{unpaved_i} = \left(\frac{k(S/12)^1(S/30)^{0.5}}{(M/0.5)^{0.2}} - C \right) \times \left(1 - \frac{P}{365} \right)$$

Where:

$EF_{unpaved_i}$ = unpaved road dust emission factor for pollutant i (grams/mile)

k_i = particle size multiplier for pollutant i (grams/VMT) (the U.S. EPA's AP-42 default values are 81.65 for PM_{2.5} and 816.47 for PM₁₀)

s = surface material silt content (%) (the U.S. EPA's AP-42 default value is 8.5)

M = surface material moisture content (%) (the CalEEMod default value is 0.5)

S = mean vehicle speed (miles/hour) (the CalEEMod default value is 40)

C = emission factor for vehicle fleet exhaust, brakewear, and tirewear

P = number of "wet" days with at least 0.01 inch of precipitation

1.1.3 Earthwork Fugitive Dust

The following equations were used to calculate emissions from grading:

$$E_i = EF_i \times A$$

$$EF_{PM_{10}} = 0.051 \times S^2 \times F \times \frac{1}{Wb}$$

$$EF_{PM_{2.5}} = 0.04 \times S^{2.5} \times F \times \frac{1}{Wb}$$

Where:

E_i = emissions for pollutant i (pounds)

A = area graded (acres)

EF_i = emission factor for pollutant i (pounds/acre)

S = mean vehicle speed (miles/hour) (the U.S. EPA's AP-42 default value is 7.1)

F = scaling factor (the U.S. EPA's AP-42 default value is 0.031 for PM_{2.5} and 0.6 for PM₁₀)

Wb = blade width of the grading equipment (feet) (the CalEEMod default is 12)

The daily graded area was determined by comparing the average daily use, by grading equipment, against standard grading efficiency values contained in Table G-14 from Appendix G of the CalEEMod Guide. Consistent with the CalEEMod Guide Section 4.4.4 Emissions Control, a 61 percent reduction in fugitive dust emissions would result from water two times daily, consistent with APM AIR-2.

1.1.4 Helicopter Emissions

Helicopter emissions were calculated using emission factors and methods from *Guidance on the Determination of Helicopter Emissions, Edition 2* prepared by Switzerland's Federal Office of Civil Aviation.

1.1.5 Electricity Consumption

The proposed LSPGC Manning Substation would consume electricity during daily operation. The following equation was used to calculate the annual GHG emissions due to electricity consumption:

$$E_i = C \times EF_i$$

Where:

E_i = emissions for pollutant i (metric tons)

C = annual electricity consumed (kilowatt hours/year)

EF_i = emission factor for pollutant i (pounds/megawatt hour)

Emission factors were obtained from Table G-3 from the CalEEMod Guide.

1.1.6 Fugitive SF₆ Emissions

The new circuit breakers and gas-insulated switchgear control buildings that would be installed at the proposed LSPGC Manning Substation would utilize SF₆ as an insulating medium. The following equation was used to calculate the annual emissions due to the leaking of SF₆ gas during operation:

$$E_i = \frac{L}{100} \times M_i$$

Where:

E_i = SF₆ emissions (pounds of SF₆/year)

L = SF₆ leak rate (percent/year)

M_i = mass of SF₆ in equipment i (pounds)

1.2 EMISSIONS INPUTS

The entirety of the construction process was separated into 39 unique phases of construction. For each phase of construction, the specified off-road equipment, on-road vehicles, and helicopters were assumed to operate for the entire duration of the phase. Work was assumed to occur every day of the week except Sundays and federal holidays.

1.2.0 Off-Road Equipment and Helicopters

Off-road equipment and helicopter assumptions were taken from Table 3-5: Proposed Construction Equipment and Workforce from Chapter 3 – Project Description. Each piece of equipment was conservatively assumed to operate each working day of construction.

1.2.1 On-Road Vehicles

On-road vehicle requirements were taken from Table 3-5: Proposed Construction Equipment and Workforce from Chapter 3 – Project Description. Required worker commutes for each phase were calculated by subtracting the estimated workforce from the number of 1-ton pickup trucks, 0.5-ton pickup trucks, and welding trucks. The latter three classes of on-road vehicles were assumed to return home with workers each day.

On-road vehicle distances were generally assumed to be 50 miles for each one-way vehicle trip (the approximate distance to the City of Fresno from the Proposed Project). Water trucks were assumed to travel approximately 20 miles per day from the nearest water source to the Proposed Project. With the exception of water trucks and worker commutes, each on-road vehicle trip type was assigned one of the following route types:

- Site – vehicle would travel to specified work areas, or
- Staging Yard – vehicle would travel to the nearest staging yard.

The paved and unpaved road distances for each trip type were estimated using aerial imagery. Unless specified, each vehicle was assumed to make one round trip each day.

1.2.2 Earthwork

Fugitive dust emissions were calculated during all off-road equipment use for motor graders and scrapers.

1.2.3 Electricity Consumption

Estimated values for annual electricity consumption at the proposed LSPGC Manning Substation were supplied by LSPGC.

1.2.4 Fugitive SF₆

The volume of SF₆ contained at the proposed LSPGC Manning Substation were supplied by LSPGC. A conservative leak rate of 1 percent was utilized for the calculation of all emissions.

1.3 EMISSIONS SCENARIOS

Compliance with San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds were evaluated in many ways, in accordance with its Guidance for Assessing and Mitigating Air Quality Impacts. The methods for each scenario are described in the subsections that follow. All scenarios included the preparation of uncontrolled and controlled calculations (i.e., with the incorporation of APMs AIR-1 and AIR-2).

1.3.0 Rolling 12-Month Construction Emissions

The SJVAPCD recommends that 12-month rolling emissions be compared to the applicable annual thresholds when a project's construction phase lasts more than 1 year. Construction is anticipated to require 29 months to complete; therefore, 17 separate rolling 12-month periods were developed for evaluation.

The following equation was used to calculate the annual emissions for each rolling 12-month period of construction:

$$E_{i,j} = \sum_{k=1}^{39} EF_{i,k} \times WD_{j,k}$$

Where:

$E_{i,j}$ = emissions for pollutant i during 12-month period j (tons)

k = number of construction phases

$EF_{i,k}$ = daily emissions for pollutant i for phase k (tons/day)

$WD_{j,k}$ = working days during 12-month period j for phase k

The maximum emissions for each pollutant across the rolling 12-month periods were compared to the applicable SJVAPCD thresholds.

1.3.1 Daily On-Site Emissions

The SJVAPCD recommends that all projects utilize a 100-pound-per-day threshold for all pollutants to evaluate a project's on-site emissions. The following steps were utilized to evaluate on-site emissions.

First, on-site emissions were calculated by summing the following values:

- Off-road equipment exhaust emissions,
- 20 percent of on-road vehicle exhaust and entrained road dust emissions,¹
- Earthwork emissions, and

¹ Only a small portion of the daily 100-mile round trip for on-road vehicle travel would occur on site.

- Helicopter emissions.

Next, the Proposed Project construction phases were placed into five distinct groups. Each group identified construction activities that could occur in the same geographic area, representing activities that could contribute to a receptor being exposed to increased criteria air pollutant emissions.

Lastly, on-site emissions for each of the 689 days of construction were calculated using the following equation:

$$E_{i,l} = \sum_{k=1}^{39} EF_{i,k} \times WD_k \times G_l$$

Where:

$E_{i,l}$ = emissions for pollutant i associated with group l (pounds)

k = number of construction phases

$EF_{i,k}$ = daily emissions for pollutant i for phase k (pounds/day)

WD_k = boolean operator identifying if the current day of construction is considered a working day for phase k (a value of 0 was used for false and 1 for true)

G_l = boolean operator identifying if phase k is associated with group l (a value of 0 was used for false and 1 for true)

The resulting emissions were then compared to the 100-pound-per-day threshold.

ATTACHMENT A: CALCULATION RESULTS

Table 1: Off-Road Equipment Load Factors

OFFROAD Equipment Type	Load Factor
Aerial Lifts	0.31
Air Compressors	0.48
Bore/Drill Rigs	0.5
Cement and Mortar Mixers	0.56
Concrete/Industrial Saws	0.73
Cranes	0.29
Crawler Tractors	0.43
Crushing/Proc. Equipment	0.78
Dumpers/Tenders	0.38
Excavators	0.38
Forklifts	0.2
Generator Sets	0.74
Graders	0.41
Off-Highway Tractors	0.44
Off-Highway Trucks	0.38
Other Construction Equipment	0.42
Other General Industrial Equipment	0.34
Other Material Handling Equipment	0.4
Pavers	0.42
Paving Equipment	0.36
Plate Compactors	0.43
Pressure Washers	0.3
Pumps	0.74
Rollers	0.38
Rough Terrain Forklifts	0.4
Rubber Tired Dozers	0.4
Rubber Tired Loaders	0.36
Scrapers	0.48
Signal Boards	0.82
Skid Steer Loaders	0.37
Surfacing Equipment	0.3
Sweepers/Scrubbers	0.46
Tractors/Loaders/Backhoes	0.37
Trenchers	0.5
Welders	0.45

Table 2: EMFAC Emissions Inventory - Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Trips	Fuel Consumption	Efficiency
San Joaquin Valley Unified APCD	2026	HHDT	Aggregate	Aggregate	Gasoline	6.412431143	174922.0576	174922.1	41954.0746	46.05029708	3.798500089
San Joaquin Valley Unified APCD	2026	HHDT	Aggregate	Aggregate	Diesel	80105.81713	3568034205	3.57E+09	432409164.8	571390.2772	6.244478332
San Joaquin Valley Unified APCD	2026	LDA	Aggregate	Aggregate	Gasoline	1402026.312	19408367202	1.94E+10	2249558454	628689.1533	30.87116598
San Joaquin Valley Unified APCD	2026	LDA	Aggregate	Aggregate	Diesel	3072.686012	33274491.69	33274492	4522223.912	738.0567343	45.08392125
San Joaquin Valley Unified APCD	2026	LDT1	Aggregate	Aggregate	Gasoline	125594.0689	1441811864	1.44E+09	187381178.8	56718.20202	25.42062006
San Joaquin Valley Unified APCD	2026	LDT1	Aggregate	Aggregate	Diesel	54.83764942	231619.6123	231619.6	52694.2875	9.187496301	25.21030808
San Joaquin Valley Unified APCD	2026	LDT2	Aggregate	Aggregate	Gasoline	657762.1166	9029749273	9.03E+09	1058524942	358392.7847	25.19512015
San Joaquin Valley Unified APCD	2026	LDT2	Aggregate	Aggregate	Diesel	1964.010962	28940034.35	28940034	3249367.629	819.0034601	35.33566799
San Joaquin Valley Unified APCD	2026	MHDT	Aggregate	Aggregate	Gasoline	3855.441282	73034615.21	73034615	25224671.82	15193.09233	4.80709349
San Joaquin Valley Unified APCD	2026	MHDT	Aggregate	Aggregate	Diesel	37536.35931	547651646.1	5.48E+08	140783256.5	62209.6092	8.803328829
San Joaquin Valley Unified APCD	2027	HHDT	Aggregate	Aggregate	Gasoline	5.50876722	170263.4255	170263.4	36041.74856	43.31273924	3.931024186
San Joaquin Valley Unified APCD	2027	HHDT	Aggregate	Aggregate	Diesel	82026.15764	3617891547	3.62E+09	442142855	569219.0668	6.355886087
San Joaquin Valley Unified APCD	2027	LDA	Aggregate	Aggregate	Gasoline	1406769.32	19497820101	1.95E+10	2256588807	619100.5386	31.49378637
San Joaquin Valley Unified APCD	2027	LDA	Aggregate	Aggregate	Diesel	2802.131058	30485515.45	30485515	4140125.012	666.5692674	45.73495499
San Joaquin Valley Unified APCD	2027	LDT1	Aggregate	Aggregate	Gasoline	122673.5424	1417896399	1.42E+09	183341359.8	54709.82899	25.91666662
San Joaquin Valley Unified APCD	2027	LDT1	Aggregate	Aggregate	Diesel	30.38659233	132610.9565	132611	29318.0944	5.109887717	25.95183375
San Joaquin Valley Unified APCD	2027	LDT2	Aggregate	Aggregate	Gasoline	673558.8378	9252702020	9.25E+09	1083734406	359046.9725	25.77017139
San Joaquin Valley Unified APCD	2027	LDT2	Aggregate	Aggregate	Diesel	2066.437528	30375210.47	30375210	3418609.57	842.5477318	36.05161978
San Joaquin Valley Unified APCD	2027	MHDT	Aggregate	Aggregate	Gasoline	3746.248836	71425140.31	71425140	24510267.57	14698.15528	4.859462901
San Joaquin Valley Unified APCD	2027	MHDT	Aggregate	Aggregate	Diesel	38350.11083	553285231.5	5.53E+08	143955871.5	62442.36298	8.860735007
San Joaquin Valley Unified APCD	2028	HHDT	Aggregate	Aggregate	Gasoline	4.836110681	168172.9422	168172.9	31640.81512	41.57942051	4.044619673
San Joaquin Valley Unified APCD	2028	HHDT	Aggregate	Aggregate	Diesel	83697.64325	3662894453	3.66E+09	450666985.5	565688.5733	6.475107729
San Joaquin Valley Unified APCD	2028	LDA	Aggregate	Aggregate	Gasoline	1411982.825	19586493691	1.96E+10	2264470526	610072.4033	32.10519536
San Joaquin Valley Unified APCD	2028	LDA	Aggregate	Aggregate	Diesel	2537.306368	27852459.76	27852460	3771322.873	599.5588682	46.45492083
San Joaquin Valley Unified APCD	2028	LDT1	Aggregate	Aggregate	Gasoline	120136.6958	1397308239	1.4E+09	179879721.4	52892.36884	26.41795536
San Joaquin Valley Unified APCD	2028	LDT1	Aggregate	Aggregate	Diesel	18.19655134	83963.15129	83963.15	17626.2612	3.141985914	26.72295599
San Joaquin Valley Unified APCD	2028	LDT2	Aggregate	Aggregate	Gasoline	689476.8989	9465042826	9.47E+09	1108832530	359659.8361	26.31665223
San Joaquin Valley Unified APCD	2028	LDT2	Aggregate	Aggregate	Diesel	2167.093845	31721641.14	31721641	3582007.271	864.2597432	36.70382821
San Joaquin Valley Unified APCD	2028	MHDT	Aggregate	Aggregate	Gasoline	3633.968932	69533286.24	69533286	23775663.28	14163.69936	4.909260248
San Joaquin Valley Unified APCD	2028	MHDT	Aggregate	Aggregate	Diesel	38969.23407	556087423.3	5.56E+08	146384675.5	62350.66995	8.918708071

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Air District

Region: San Joaquin Valley Unified APCD

Calendar Year: 2026, 2027, 2028

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Table 3: On-Road Fuel Efficiency (miles/gallon)

Vehicle Category	Year	Fuel	Efficiency
passenger	2026	Gas	26.73
vendor	2026	Gas	4.81
hhdt	2026	Gas	3.80
passenger	2026	Diesel	32.71
vendor	2026	Diesel	8.80
hhdt	2026	Diesel	6.24

Table 4: EMFAC On-Road Emissions

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX
San Joaquin Valley Unified APCD	2026	HHDT	Aggregate	Aggregate	Gasoline	6.412431143	174922.0576	174922.1	0	41954.07	1.223970952	0	0.004316268	0.000432977	0	5.98783E-05
San Joaquin Valley Unified APCD	2026	HHDT	Aggregate	Aggregate	Diesel	80105.81713	3568034205	3.57E+09	0	4.32E+08	6201.12669	2153.070317	1370.986381	107.676852	0.870064741	0
San Joaquin Valley Unified APCD	2026	LDA	Aggregate	Aggregate	Gasoline	1402026.312	19408367202	1.94E+10	0	2.25E+09	734.5153303	0	581.3605864	23.12267044	0	4.568702994
San Joaquin Valley Unified APCD	2026	LDA	Aggregate	Aggregate	Diesel	3072.686012	33274491.69	33274492	0	4522224	6.36075037	0	0	0.460931521	0	0
San Joaquin Valley Unified APCD	2026	LDT1	Aggregate	Aggregate	Gasoline	125594.0689	1441811864	1.44E+09	0	1.87E+08	234.9078617	0	89.75743972	2.733500403	0	0.608220209
San Joaquin Valley Unified APCD	2026	LDT1	Aggregate	Aggregate	Diesel	54.83764942	231619.6123	231619.6	0	52694.29	0.400846895	0	0	0.055420785	0	0
San Joaquin Valley Unified APCD	2026	LDT2	Aggregate	Aggregate	Gasoline	657762.1166	9029749273	9.03E+09	0	1.06E+09	625.4826707	0	370.1760469	11.08204741	0	2.193539118
San Joaquin Valley Unified APCD	2026	LDT2	Aggregate	Aggregate	Diesel	1964.010962	28940034.35	28940034	0	3249368	1.36808746	0	0	0.156493764	0	0
San Joaquin Valley Unified APCD	2026	MHDT	Aggregate	Aggregate	Gasoline	3855.441282	73034615.21	73034615	0	25224672	31.19444502	0.117894671	11.40792328	0.106232851	0	0.014128793
San Joaquin Valley Unified APCD	2026	MHDT	Aggregate	Aggregate	Diesel	37536.35931	547651646.1	5.48E+08	0	1.41E+08	576.7497747	149.7017497	250.0116731	5.739559272	0.25231249	0
San Joaquin Valley Unified APCD	2027	HHDT	Aggregate	Aggregate	Gasoline	5.50876722	170263.4255	170263.4	0	36041.75	1.032900388	0	0.003537483	0.000363171	0	4.38811E-05
San Joaquin Valley Unified APCD	2027	HHDT	Aggregate	Aggregate	Diesel	82026.15764	3617891547	3.62E+09	0	4.42E+08	6129.450524	2153.804568	1400.009665	108.6845952	0.870183154	0
San Joaquin Valley Unified APCD	2027	LDA	Aggregate	Aggregate	Gasoline	1406769.32	19497820101	1.95E+10	0	2.26E+09	683.1140575	0	560.7537615	22.2769011	0	4.439106386
San Joaquin Valley Unified APCD	2027	LDA	Aggregate	Aggregate	Diesel	2802.131058	30485515.45	30485515	0	4140125	4.937153208	0	0	0.357756113	0	0
San Joaquin Valley Unified APCD	2027	LDT1	Aggregate	Aggregate	Gasoline	122673.5424	1417896399	1.42E+09	0	1.83E+08	204.6726826	0	82.23484259	2.497358322	0	0.558165569
San Joaquin Valley Unified APCD	2027	LDT1	Aggregate	Aggregate	Diesel	30.38659233	132610.9565	132611	0	29318.09	0.202673455	0	0	0.028350817	0	0
San Joaquin Valley Unified APCD	2027	LDT2	Aggregate	Aggregate	Gasoline	673558.8378	9252702020	9.25E+09	0	1.08E+09	575.4618606	0	357.4107664	10.83706066	0	2.163762283
San Joaquin Valley Unified APCD	2027	LDT2	Aggregate	Aggregate	Diesel	2066.437528	30375210.47	30375210	0	3418610	1.241974204	0	0	0.145707095	0	0
San Joaquin Valley Unified APCD	2027	MHDT	Aggregate	Aggregate	Gasoline	3746.248836	71425140.31	71425140	0	24510268	26.32171431	0.11213126	10.73348165	0.103267963	0	0.01322148
San Joaquin Valley Unified APCD	2027	MHDT	Aggregate	Aggregate	Diesel	38350.11083	553285231.5	5.53E+08	0	1.44E+08	533.7494316	145.3505598	253.9090582	5.121819363	0.210129302	0
San Joaquin Valley Unified APCD	2028	HHDT	Aggregate	Aggregate	Gasoline	4.836110681	168172.9422	168172.9	0	31640.82	0.904306277	0	0.002676175	0.000326042	0	3.33827E-05
San Joaquin Valley Unified APCD	2028	HHDT	Aggregate	Aggregate	Diesel	83697.64325	3662894453	3.66E+09	0	4.51E+08	6060.757157	2151.474555	1416.588199	109.6470677	0.871325871	0
San Joaquin Valley Unified APCD	2028	LDA	Aggregate	Aggregate	Gasoline	1411982.825	19586493691	1.96E+10	0	2.26E+09	642.3834107	0	543.3406487	21.25773315	0	4.280756852
San Joaquin Valley Unified APCD	2028	LDA	Aggregate	Aggregate	Diesel	2537.306368	27852459.76	27852460	0	3771323	3.775910194	0	0	0.268486165	0	0
San Joaquin Valley Unified APCD	2028	LDT1	Aggregate	Aggregate	Gasoline	120136.6958	1397308239	1.4E+09	0	1.8E+08	178.4769755	0	75.47993187	2.280285777	0	0.513106261
San Joaquin Valley Unified APCD	2028	LDT1	Aggregate	Aggregate	Diesel	18.19655134	83963.15129	83963.15	0	17626.26	0.117153751	0	0	0.016166907	0	0
San Joaquin Valley Unified APCD	2028	LDT2	Aggregate	Aggregate	Gasoline	689476.8989	9465042826	9.47E+09	0	1.11E+09	533.1932787	0	347.1405113	10.48926453	0	2.116586014
San Joaquin Valley Unified APCD	2028	LDT2	Aggregate	Aggregate	Diesel	2167.093845	31721641.14	31721641	0	3582007	1.162861088	0	0	0.139536944	0	0
San Joaquin Valley Unified APCD	2028	MHDT	Aggregate	Aggregate	Gasoline	3633.968932	69533286.24	69533286	0	23775663	22.10699917	0.106145889	10.00249297	0.100146051	0	0.012406279
San Joaquin Valley Unified APCD	2028	MHDT	Aggregate	Aggregate	Diesel	38969.23407	556087423.3	5.56E+08	0	1.46E+08	492.6466506	140.6446324	253.4434243	4.588398328	0.174473935	0

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Air District

Region: San Joaquin Valley Unified APCD

Calendar Year: 2026, 2027, 2028

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX
0.000964093	0.006419637	0.000470902	0	6.51231E-05	0.003856371	0.01834182	434.1728546	0	2.534994908	0.040159597	0	7.23024E-06	0.037588993	0	0.000129334	0.23482541
35.10391873	105.715647	112.5455215	0.909405208	0	140.4156749	302.0447058	5974679.076	421747.7796	0	2.469785535	8.726563249	0	941.3131215	66.44653443	0	53.17380529
42.78812605	53.3396159	25.14801383	0	4.968881359	171.1525042	152.3989026	5795346.1	0	166689.0128	41.02828793	0	158.3213793	90.18791886	0	78.81530427	148.516028
0.073357698	0.093709251	0.481772799	0	0	0.293430792	0.267740718	8262.174042	0	0	0.037736878	0	0	1.301708885	0	0	0.812452765
3.178651103	4.715114193	2.972931095	0	0.661494971	12.71460441	13.47175484	519863.2849	0	18011.29144	11.04939467	0	24.26816006	16.88110714	0	8.433576661	49.25626916
0.000510634	0.000835787	0.057926667	0	0	0.002042535	0.002387964	102.8494016	0	0	0.003333997	0	0	0.016203965	0	0	0.071778989
19.90718984	28.21773651	12.05273769	0	2.385673931	79.62875935	80.62210432	3300633.861	0	98105.17458	26.00393521	0	90.50663539	56.20133476	0	42.25229463	100.1035464
0.063801855	0.088659352	0.163569718	0	0	0.255207421	0.253312434	9168.331937	0	0	0.019359032	0	0	1.44447443	0	0	0.416788563
0.241520647	1.269281245	0.115537918	0	0.015366352	0.966082589	3.626517842	142078.0155	738.4661633	1263.863049	1.028743889	0.366773365	1.283013486	1.610364055	0.010071956	0.887697805	5.054453719
1.811047812	9.501271401	5.999076673	0.263720941	0	7.244191247	27.14648972	668381.529	28023.76671	0	0.561393818	0.132036936	0	105.3037821	4.415155857	0	12.08665495
0.000938416	0.006181128	0.000394981	0	4.77247E-05	0.003753666	0.017660366	408.5766596	0	2.17016312	0.031982926	0	6.785E-06	0.033232075	0	0.000112176	0.180513454
35.59760711	108.109706	113.5988303	0.909528975	0	142.3904285	308.8848743	5949818.736	422302.5111	0	2.441549328	8.895429168	0	937.3963648	66.5339326	0	52.56588751
42.98533591	53.18430943	24.22816251	0	4.827933223	171.9413436	151.9551698	5707492.781	0	163610.8157	38.05307833	0	150.471544	86.9872533	0	77.28143601	135.3546714
0.067209058	0.085364966	0.373932257	0	0	0.268836231	0.243899902	7461.907795	0	0	0.03057693	0	0	1.175626612	0	0	0.658303303
3.125926525	4.593611767	2.716105037	0	0.607055984	12.5037061	13.12460505	501645.0756	0	17183.53751	9.611122487	0	22.04940213	15.08869764	0	7.9681586	42.52166995
0.000292357	0.000466859	0.029632715	0	0	0.001169428	0.001333882	57.20262371	0	0	0.001748646	0	0	0.009012297	0	0	0.037647315
20.3987165	28.74058334	11.78629225	0	2.353288907	81.59486602	82.11595241	3306981.093	0	97961.78871	24.48615976	0	87.57796543	54.04359915	0	42.07837559	92.70376109
0.066965877	0.092697401	0.152295324	0	0	0.267863509	0.264849718	9431.89822	0	0	0.019252551	0	0	1.485999406	0	0	0.414496096
0.23619822	1.241310341	0.112313333	0	0.014379566	0.944792881	3.546600976	137465.3164	711.8316621	1209.570196	0.862832042	0.359523781	1.215825395	1.416120067	0.009720182	0.855228028	4.175366465
1.829677707	9.598479379	5.353405307	0.219630417	0	7.318710827	27.4242268	670640.1813	28370.67596	0	0.497051991	0.128946152	0	105.6596337	4.469811551	0	10.70139306
0.000926895	0.006063585	0.000354601	0	3.63067E-05	0.003707579	0.01732453	392.4237921	0	1.885484305	0.027328313	0	6.08287E-06	0.030237268	0	8.29085E-05	0.149835872
36.04469462	110.3483727	114.6048215	0.91072336	0	144.1787785	315.2810649	5910866.508	421732.6395	0	2.418437731	9.045624944	0	931.2594255	66.44414909	0	52.06830116
43.18082772	53.43052445	23.11972438	0	4.655713657	172.7233109	152.6586413	5624682.008	0	160805.2572	35.608017719	0	143.3638004	84.45557832	0	75.9549487	124.5869213
0.061404164	0.078090392	0.280625918	0	0	0.245616655	0.223115407	6711.760068	0	0	0.025324671	0	0	1.057440532	0	0	0.545225226
3.080537402	4.518191366	2.480018838	0	0.558049875	12.32214961	12.90911819	485145.6843	0	16447.44579	8.426032425	0	20.09785842	13.54615978	0	7.55253398	36.99493513
0.000185107	0.000294753	0.016897903	0	0	0.000740428	0.000842153	35.1729525	0	0	0.001214094	0	0	0.005541513	0	0	0.026138739
20.86684785	29.42988649	11.40803222	0	2.301980409	83.46739141	84.08538996	3312814.248	0	97940.59081	23.24520947	0	84.97448971	52.27719297	0	42.05674766	86.59174071
0.069934249	0.097119076	0.145846185	0	0	0.279736995	0.277483075	9674.953271	0	0	0.019587581	0	0	1.524292828	0	0	0.421709089
0.229941984	1.208431883	0.108917968	0	0.01349296	0.919767935	3.452662522	132477.7813	685.0414954	1155.500523	0.726523756	0.351368763	1.150547283	1.236225187	0.00933132	0.811674539	3.458287659
1.83894437	9.646373831	4.79586534	0.182362872	0	7.355777479	27.56106809	669406.3125	28578.08743	0	0.441764418	0.126169115	0	105.4652371	4.502489313	0	9.511066782

ROG_IDLEX	ROG_STREX	ROG_HOTSOAK	ROG_RUNLOSS	ROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSOAK	TOG_RUNLOSS	TOG_DIURN	NH3_RUNEX	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
0	3.92493E-05	0.004587318	0.040395069	0.017220408	0.342656687	0	4.2973E-05	0.004587318	0.040395069	0.017220408	0.008545898	9.409734514	0	0.22987664	0.004292241	0	2.5061E-05
187.8805137	0	0	0	0	60.53432967	213.8876632	0	0	0	0	860.5023348	240.7208502	2761.96806	0	56.57663805	3.993699272	0
0	700.696719	218.9457948	573.7709188	823.3528653	216.7142394	0	767.174709	218.9457948	573.7709188	823.3528653	773.5224227	15053.88716	0	7013.686255	57.29289632	0	1.647890595
0	0	0	0	0	0.924923458	0	0	0	0	0	0.113704398	11.2082454	0	0	0.078288298	0	0
0	128.1530827	44.92156784	131.0464258	180.0624559	71.87463233	0	140.3114946	44.92156784	131.0464258	180.0624559	60.40913674	2636.758172	0	1226.001069	5.139377833	0	0.178059953
0	0	0	0	0	0.081715606	0	0	0	0	0	0.000791482	0.464411915	0	0	0.00097455	0	0
0	414.5275623	104.0688349	297.6884299	422.7912776	146.0708599	0	453.8555032	104.0688349	297.6884299	422.7912776	373.875975	8379.101769	0	3986.529217	32.63012602	0	0.969869529
0	0	0	0	0	0.474486069	0	0	0	0	0	0.098892846	4.013453643	0	0	0.086874604	0	0
1.408247578	6.993796846	1.014880066	8.286422546	4.471865009	7.375447001	2.05491156	7.657327222	1.014880066	8.286422546	4.471865009	3.621933737	105.767989	21.0176102	149.3610809	1.40458583	0.00730049	0.012494573
2.842719018	0	0	0	0	13.75973661	3.236219211	0	0	0	0	129.4476922	52.00527525	95.0561267	0	6.329173395	0.265368313	0
0	3.68167E-05	0.003484274	0.030617524	0.013194705	0.263404808	0	4.03096E-05	0.003484274	0.030617524	0.013194705	0.008408298	7.501481376	0	0.213342934	0.004039196	0	2.14543E-05
191.5161507	0	0	0	0	59.84226155	218.0265591	0	0	0	0	873.0103325	232.4626179	2817.55999	0	56.3412255	3.998952248	0
0	659.6114308	211.8716387	568.7697157	811.766211	197.5092187	0	722.19149	211.8716387	568.7697157	811.766211	794.9710332	14418.79791	0	6686.822731	56.42437682	0	1.617459482
0	0	0	0	0	0.749434543	0	0	0	0	0	0.104174008	9.784414902	0	0	0.070705369	0	0
0	115.2055835	41.21591217	119.6593322	166.3106095	62.04752098	0	126.1356127	41.21591217	119.6593322	166.3106095	59.69297219	2356.334176	0	1107.377328	4.959272287	0	0.169876762
0	0	0	0	0	0.042858965	0	0	0	0	0	0.000453153	0.2876752	0	0	0.000542024	0	0
0	396.69725	101.9905701	296.1648502	420.0932179	135.2731106	0	434.3335556	101.9905701	296.1648502	420.0932179	389.588209	8118.494772	0	3864.284006	32.69287487	0	0.968452014
0	0	0	0	0	0.471876248	0	0	0	0	0	0.103797078	4.113299895	0	0	0.089372029	0	0
1.371401891	6.546560946	0.922015737	7.577747298	4.133898636	6.092684945	2.00114642	7.167660206	0.922015737	7.577747298	4.133898636	3.542972287	86.09051102	20.4575866	139.2368929	1.358984603	0.007037181	0.011957833
2.776175302	0	0	0	0	12.1827214	3.160464256	0	0	0	0	131.3041394	48.38606785	97.0106634	0	6.350561481	0.268653336	0
0	3.29971E-05	0.002638851	0.023148939	0.010099501	0.218640153	0	3.61276E-05	0.002638851	0.023148939	0.010099501	0.00834205	6.504708759	0	0.196173168	0.003879509	0	1.86399E-05
194.7498245	0	0	0	0	59.27579736	221.7078506	0	0	0	0	884.3044664	225.5578928	2866.92073	0	55.9723712	3.993555904	0
0	622.9695092	203.8097245	558.5612457	794.1804528	181.7969431	0	682.073198	203.8097245	558.5612457	794.1804528	815.0505161	13912.07746	0	6398.401964	55.60570801	0	1.58972368
0	0	0	0	0	0.620702709	0	0	0	0	0	0.095176425	8.48037752	0	0	0.063597338	0	0
0	103.8827163	38.28318391	112.0573456	157.0427361	53.9829225	0	113.7384984	38.28318391	112.0573456	157.0427361	59.1664963	2125.462873	0	1004.171989	4.796159006	0	0.162599746
0	0	0	0	0	0.029757217	0	0	0	0	0	0.000286916	0.197254141	0	0	0.000333282	0	0
0	380.9046596	99.01608173	289.6007002	411.3585596	126.3544648	0	417.042657	99.01608173	289.6007002	411.3585596	404.3611847	7929.861998	0	3762.646384	32.75054154	0	0.968242451
0	0	0	0	0	0.48008776	0	0	0	0	0	0.108398053	4.233453394	0	0	0.091675099	0	0
1.333002022	6.115676807	0.835996574	6.958797118	3.829486563	5.046325234	1.945113422	6.69589631	0.835996574	6.958797118	3.829486563	3.449128768	69.54743368	19.8758016	129.322259	1.30967774	0.006772333	0.011423299
2.716386444	0	0	0	0	10.82762554	3.092399192	0	0	0	0	132.414231	45.16403168	98.5251677	0	6.338877482	0.270617399	0

Table 5: On-Road Exhaust and Wear (grams/mile)

Region	Calendar Year	Vehicle Category	Fuel	Concat	ROG_Mile	NOx_Mile	CO_Mile	SOx_Mile	PM10_Mile	PM2.5_Mile	CO2_Mile	CH4_Mile	N2O_Mile	TOG_Mile
Mojave Desert	2026	HHDT	Gas	HHDT_Gas	1.217857214	6.347787717	48.80099242	0.022260522	0.117566995	0.040539191	2251.717746	0.208276672	0.194944945	1.777094388
Mojave Desert	2026	HHDT	Diesel	HHDT_Diesel	0.013519623	1.576657844	0.061204106	0.014384805	0.141112164	0.063181071	1519.082757	0.000627951	0.239332107	0.015391062
Mojave Desert	2026	LDA	Gas	LDA_Gas	0.006941929	0.034332682	0.703648096	0.002677982	0.016298892	0.005573997	270.8857987	0.001917742	0.00421556	0.010129647
Mojave Desert	2026	LDA	Diesel	LDA_Diesel	0.02215045	0.173417445	0.305577985	0.002134427	0.028434497	0.017121548	225.2572459	0.001028846	0.035489371	0.025216815
Mojave Desert	2026	LDT1	Gas	LDT1_Gas	0.030991941	0.147803534	1.659042711	0.003233686	0.018346964	0.006686653	327.0968883	0.006952256	0.010621557	0.05223368
Mojave Desert	2026	LDT1	Diesel	LDT1_Diesel	0.281136909	1.569997837	1.81896308	0.003817023	0.244234438	0.222340231	402.8304575	0.013058272	0.063466103	0.320055679
Mojave Desert	2026	LDT2	Gas	LDT2_Gas	0.010057027	0.062839895	0.841816889	0.003278226	0.017310696	0.005948302	331.6022892	0.002612518	0.005646337	0.014675191
Mojave Desert	2026	LDT2	Diesel	LDT2_Diesel	0.013065096	0.04288552	0.125809973	0.002723263	0.021068032	0.00968483	287.4002535	0.000606849	0.045280027	0.014873743
Mojave Desert	2026	MHDT	Gas	MHDT_Gas	0.062782895	0.387475617	1.313776116	0.017446785	0.058481208	0.020085677	1764.793915	0.012778338	0.020002818	0.091612653
Mojave Desert	2026	MHDT	Diesel	MHDT_Diesel	0.020021545	0.955386053	0.086146743	0.010484276	0.066905637	0.028246438	1107.174062	0.000929949	0.174435724	0.022793005
Mojave Desert	2026	passenger	Gas	passenger_Gas	0.01974571	0.098194911	1.215887601	0.003105895	0.017575879	0.006223902	314.1704661	0.004608693	0.007776253	0.028812893
Mojave Desert	2026	passenger	Diesel	passenger_Diesel	0.149372341	0.839074659	1.01732853	0.003122934	0.134492851	0.11787171	329.5796036	0.00693806	0.051925401	0.170050479
Mojave Desert	2026	vendor	Gas	vendor_Gas	0.062782895	0.387475617	1.313776116	0.017446785	0.058481208	0.020085677	1764.793915	0.012778338	0.020002818	0.091612653
Mojave Desert	2026	vendor	Diesel	vendor_Diesel	0.020021545	0.955386053	0.086146743	0.010484276	0.066905637	0.028246438	1107.174062	0.000929949	0.174435724	0.022793005
Mojave Desert	2026	hhdt	Gas	hhdt_Gas	1.217857214	6.347787717	48.80099242	0.022260522	0.117566995	0.040539191	2251.717746	0.208276672	0.194944945	1.777094388
Mojave Desert	2026	hhdt	Diesel	hhdt_Diesel	0.013519623	1.576657844	0.061204106	0.014384805	0.141112164	0.063181071	1519.082757	0.000627951	0.239332107	0.015391062

Table 6: On-Road Start Up and Evap (grams/trip)

Region	Calendar Year	Vehicle Category	Fuel	Concat	ROG_Trip	NOx_Trip	CO_Trip	SOx_Trip	PM10_Trip	PM2.5_Trip	CO2_Trip	CH4_Trip	N2O_Trip	TOG_Trip
Mojave Desert	2026	HHDT	Gas	HHDT_Gas	0.973515756	0.093331896	4.970688577	0.000541901	0.001408175	0.001294765	54.8149227	0.000156342	0.002796625	0.973596276
Mojave Desert	2026	HHDT	Diesel	HHDT_Diesel	0	2.876299535	0	0	0	0	0	0	0	0
Mojave Desert	2026	LDA	Gas	LDA_Gas	0.602252528	0.234446721	2.828426598	0.000664549	0.002003813	0.001842432	67.22109036	0.063846654	0.031784043	0.629061271
Mojave Desert	2026	LDA	Diesel	LDA_Diesel	0	0	0	0	0	0	0	0	0	0
Mojave Desert	2026	LDT1	Gas	LDT1_Gas	1.472368145	0.434550596	5.935546929	0.000862057	0.003202554	0.00294463	87.19965116	0.11749158	0.040830217	1.531231736
Mojave Desert	2026	LDT1	Diesel	LDT1_Diesel	0	0	0	0	0	0	0	0	0	0
Mojave Desert	2026	LDT2	Gas	LDT2_Gas	0.699578556	0.317251057	3.416565226	0.000831205	0.002044588	0.001879923	84.07883391	0.077566677	0.036211379	0.733283684
Mojave Desert	2026	LDT2	Diesel	LDT2_Diesel	0	0	0	0	0	0	0	0	0	0
Mojave Desert	2026	MHDT	Gas	MHDT_Gas	0.586040124	0.41027677	5.371650943	0.000449357	0.000552638	0.000508131	45.45381634	0.046142546	0.031925336	0.609903459
Mojave Desert	2026	MHDT	Diesel	MHDT_Diesel	0	1.611035611	0	0	0	0	0	0	0	0
Mojave Desert	2026	passenger	Gas	passenger_Gas	1.061641844	0.355199743	4.529021421	0.000804967	0.002613377	0.002402904	81.42480665	0.094099123	0.037413964	1.106202107
Mojave Desert	2026	passenger	Diesel	passenger_Diesel	0	0	0	0	0	0	0	0	0	0
Mojave Desert	2026	vendor	Gas	vendor_Gas	0.586040124	0.41027677	5.371650943	0.000449357	0.000552638	0.000508131	45.45381634	0.046142546	0.031925336	0.609903459
Mojave Desert	2026	vendor	Diesel	vendor_Diesel	0	1.611035611	0	0	0	0	0	0	0	0
Mojave Desert	2026	hhdt	Gas	hhdt_Gas	0.973515756	0.093331896	4.970688577	0.000541901	0.001408175	0.001294765	54.8149227	0.000156342	0.002796625	0.973596276
Mojave Desert	2026	hhdt	Diesel	hhdt_Diesel	0	2.876299535	0	0	0	0	0	0	0	0

Table 7: On-Road Start Idle and Evap (grams/vehicle/day)

Region	Calendar Year	Vehicle Category	Fuel	Concat	ROG_Vehicle	NOx_Vehicle	CO_Vehicle	SOx_Vehicle	PM10_Vehicle	PM2.5_Vehicle	CO2_Vehicle	CH4_Vehicle	N2O_Vehicle	TOG_Vehicle
San Joaquin Valley	2026	HHDT	Gas	HHDT_Gas	7.020808225	0	0	0	0	0	0	0	0	7.020808225
San Joaquin Valley	2026	HHDT	Diesel	HHDT_Diesel	6.131744781	70.26847763	90.14071162	0.130339992	0.029679718	0.028395786	13764.33189	0.284803664	2.168576095	6.980524677
San Joaquin Valley	2026	LDA	Gas	LDA_Gas	1.53531051	0	0	0	0	0	0	0	0	1.53531051
San Joaquin Valley	2026	LDA	Diesel	LDA_Diesel	0	0	0	0	0	0	0	0	0	0
San Joaquin Valley	2026	LDT1	Gas	LDT1_Gas	3.748179877	0	0	0	0	0	0	0	0	3.748179877
San Joaquin Valley	2026	LDT1	Diesel	LDT1_Diesel	0	0	0	0	0	0	0	0	0	0
San Joaquin Valley	2026	LDT2	Gas	LDT2_Gas	1.680442079	0	0	0	0	0	0	0	0	1.680442079
San Joaquin Valley	2026	LDT2	Diesel	LDT2_Diesel	0	0	0	0	0	0	0	0	0	0
San Joaquin Valley	2026	MHDT	Gas	MHDT_Gas	3.987291017	0.079944109	14.25199385	0.004950446	0	0	500.7522315	0.248708188	0.006829771	4.425792398
San Joaquin Valley	2026	MHDT	Diesel	MHDT_Diesel	0.197992242	10.42656163	6.620554306	0.01848261	0.018367872	0.017573286	1951.82442	0.009196227	0.307510732	0.225399096
San Joaquin Valley	2026	passenger	Gas	passenger_Gas	2.678028086	0	0	0	0	0	0	0	0	2.678028086
San Joaquin Valley	2026	passenger	Diesel	passenger_Diesel	0	0	0	0	0	0	0	0	0	0
San Joaquin Valley	2026	vendor	Gas	vendor_Gas	3.987291017	0.079944109	14.25199385	0.004950446	0	0	500.7522315	0.248708188	0.006829771	4.425792398
San Joaquin Valley	2026	vendor	Diesel	vendor_Diesel	0.197992242	10.42656163	6.620554306	0.01848261	0.018367872	0.017573286	1951.82442	0.009196227	0.307510732	0.225399096
San Joaquin Valley	2026	hhdt	Gas	hhdt_Gas	7.020808225	0	0	0	0	0	0	0	0	7.020808225
San Joaquin Valley	2026	hhdt	Diesel	hhdt_Diesel	6.131744781	70.26847763	90.14071162	0.130339992	0.029679718	0.028395786	13764.33189	0.284803664	2.168576095	6.980524677

Note: Assume 347 days of operation

Table 8: Entrained Road Dust Emission Factors - Paved (pounds/mile)

Paved	k	sL	W	p	N	Uncontrolled EF	Controlled EF
PM10	1	0.1	2.4	2	365	0.000661537	0.000661537
PM2.5	0.25	0.1	2.4	2	365	0.000165384	0.000165384

Table 9: Entrained Road Dust Emission Factors - Unpaved (pounds/mile)

Unpaved	k	s	M	S2	C	p	Uncontrolled EF	Controlled EF
PM10	1.8	8.5	0.5	40	0.00047	2	1.463708676	0.368854586
PM2.5	0.18	8.5	0.5	40	0.00036	2	0.146059583	0.036807015

Table 10: Grading Emission Factor (pounds/acre/day)

Pollutant	S	F	Wb	UC1	UC2	Uncontrolled EF
PM10	7.1	0.6	12	43560	5280	1.060500375
PM2.5	7.1	0.031	12	43560	5280	0.114509168

Table 11: Grading Efficiency by Equipment Type

Equipment	Acres Graded per 8 hours
Crawler Tractors	0.5
Graders	0.5
Rubber Tired Dozers	0.5
Scrapers	1

Controlled EF
0.413595146
0.044658576

Table 12: Global Warming Potentials

Pollutant	GWP
CO2	1
CH4	25
N2O	298
SF6	23500

Table 13: Activity List

Index	Component	Activity Name	Workforce	Start Date	End Date	Schedule Days
L-01	General	Survey	4	4/1/2026	5/31/2026	51
L-02	LSPGC Manning Substation	Site Development	20	5/1/2026	8/1/2026	76
L-03	LSPGC Manning Substation	Below-Grade Construction	40	6/1/2026	10/31/2026	127
L-04	LSPGC Manning Substation	Above-Grade Construction (Phase 1)	30	11/1/2026	7/31/2027	224
L-39	LSPGC Manning Substation	Above-Grade Construction (Phase 2)	15	8/1/2027	10/1/2027	52
P-05	PG&E 500 kV Interconnections	Structure Foundation Installation	15	6/1/2027	7/15/2027	37
P-06	PG&E 500 kV Interconnections	Structure Installation	15	7/16/2027	8/15/2027	26
P-07	PG&E 500 kV Interconnections	Conductor Installation	30	8/16/2027	9/8/2027	20
P-08	PG&E 230 kV Interconnections	Structure Foundation Installation	15	6/1/2027	7/3/2027	28
P-09	PG&E 230 kV Interconnections	Structure Installation	15	7/4/2027	8/1/2027	23
P-10	PG&E 230 kV Interconnections	Conductor Installation	30	8/2/2027	9/15/2027	38
P-11	PG&E 230 kV Reconductoring	Access Construction	8	5/1/2026	5/31/2026	25
P-12	PG&E 230 kV Reconductoring	Structure Foundation Installation	15	6/1/2026	8/1/2026	51
P-13	PG&E 230 kV Reconductoring	Structure Installation	15	10/1/2026	11/1/2026	26
P-14	PG&E 230 kV Reconductoring	Conductor Installation	30	11/15/2026	3/31/2027	111
L-15	LSPGC 230 kV Transmission Line	Access Road Construction	12	5/1/2027	6/4/2027	29
L-16	LSPGC 230 kV Transmission Line	Structure Foundation Installation	15	6/5/2027	8/1/2027	47
L-17	LSPGC 230 kV Transmission Line	Structure Installation	15	8/2/2027	9/11/2027	35
L-18	LSPGC 230 kV Transmission Line	Conductor Installation	30	9/16/2027	11/29/2027	60
P-19	PG&E 230 kV/115 kV Structure Raises	Structure Foundation Installation	15	5/1/2026	5/31/2026	25
P-20	PG&E 230 kV/115 kV Structure Raises	Structure Installation	15	6/1/2026	6/15/2026	13
P-21	PG&E 230 kV/115 kV Structure Raises	Conductor Installation	10	6/16/2026	7/1/2026	13
P-22	PG&E Panoche Substation Modifications (Lines Group 1 of 2)	Structure Foundation Installation	8	5/1/2026	5/15/2026	13
P-23	PG&E Panoche Substation Modifications (Lines Group 1 of 2)	Structure Installation	10	6/1/2026	6/8/2026	7
P-24	PG&E Panoche Substation Modifications (Lines Group 1 of 2)	Conductor Installation	10	6/9/2026	6/15/2026	6
P-25	PG&E Panoche Substation Modifications (Lines Group 2 of 2)	Structure Foundation Installation	8	5/16/2026	5/31/2026	12
P-26	PG&E Panoche Substation Modifications (Lines Group 2 of 2)	Structure Installation	10	1/1/2027	1/31/2027	24
P-27	PG&E Panoche Substation Modifications (Lines Group 2 of 2)	Conductor Installation	10	2/1/2027	2/28/2027	23
P-28	PG&E 12 kV Distribution Line	Distribution Extension to Substation	10	6/1/2026	7/1/2026	26
L-29	LSPGC Telecommunications Extension	Fiber Extension to Substation	12	6/1/2027	8/1/2027	51
P-30	PG&E Tranquillity Switching Station Modifications	Tranquillity Outdoor	15	5/1/2026	12/31/2026	200
P-31	PG&E Tranquillity Switching Station Modifications	Tranquillity Indoor	5	11/1/2026	4/30/2027	148
P-32	PG&E Panoche Substation Modifications (Station)	Panoche Outdoor	15	5/1/2026	12/31/2026	200
P-33	PG&E Panoche Substation Modifications (Station)	Panoche Indoor	5	7/1/2026	12/31/2026	150
P-36	Other Substation Modifications	Substation Modifications	10	2/1/2027	5/1/2027	77
L-37	General	Commissioning and Testing	24	10/2/2027	6/1/2028	198
L-38	General	Site & ROW Restoration	12	2/1/2028	7/17/2028	140

Table 15: On-Road Vehicle Distance Assumptions

Component	Route Type	Trip Distance	Paved Percent	Paved Distance	Unpaved Distance	Trips Per day
General	Site	50	92	46	4	2
LSPGC Manning Substation	Site	50	97.5	48.75	1.25	2
PG&E 500 kV Interconnections	Site	50	96	48	2	2
PG&E 230 kV Interconnections	Site	50	96	48	2	2
PG&E 230 kV Reconductoring	Site	50	96	48	2	2
LSPGC 230 kV Transmission Line	Site	50	96	48	2	2
PG&E 230 kV/115 kV Structure Raises	Site	50	96	48	2	2
PG&E Panoche Substation Modifications (Lines Group 1 of 2)	Site	50	98	49	1	2
PG&E Panoche Substation Modifications (Lines Group 2 of 2)	Site	50	98	49	1	2
PG&E 12 kV Distribution Line	Site	50	97	48.5	1.5	2
LSPGC Telecommunications Extension	Site	50	97	48.5	1.5	2
PG&E Tranquillity Switching Station Modifications	Site	50	97	48.5	1.5	2
PG&E Panoche Substation Modifications (Station)	Site	50	99	49.5	0.5	2
Other Substation Modifications	Site	50	99	49.5	0.5	2
General	Staging Yard	50	97.5	48.75	1.25	2
LSPGC Manning Substation	Staging Yard	50	97.5	48.75	1.25	2
PG&E 500 kV Interconnections	Staging Yard	50	97	48.5	1.5	2
PG&E 230 kV Interconnections	Staging Yard	50	97	48.5	1.5	2
PG&E 230 kV Reconductoring	Staging Yard	50	97	48.5	1.5	2
LSPGC 230 kV Transmission Line	Staging Yard	50	97	48.5	1.5	2
PG&E 230 kV/115 kV Structure Raises	Staging Yard	50	97	48.5	1.5	2
PG&E Panoche Substation Modifications (Lines Group 1 of 2)	Staging Yard	50	97	48.5	1.5	2
PG&E Panoche Substation Modifications (Lines Group 2 of 2)	Staging Yard	50	97	48.5	1.5	2
PG&E 12 kV Distribution Line	Staging Yard	50	97	48.5	1.5	2
LSPGC Telecommunications Extension	Staging Yard	50	98	49	1	2
PG&E Tranquillity Switching Station Modifications	Staging Yard	50	98	49	1	2
PG&E Panoche Substation Modifications (Station)	Staging Yard	50	99	49.5	0.5	2
Other Substation Modifications	Staging Yard	50	99	49.5	0.5	2
Misc	Water Truck	20	80	16	4	2
Misc	Worker Commute	50	98	49	1	2

Table 17: Off-Road Uncontrolled Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-02	76	0.012	0.093	0.081	0.000	0.003	0.003	36.528	0.001	0.000
2	L-02	76	0.019	0.182	0.103	0.000	0.006	0.006	45.313	0.002	0.000
3	L-02	76	0.032	0.287	0.254	0.001	0.011	0.010	87.192	0.004	0.001
4	L-02	76	0.004	0.030	0.087	0.000	0.001	0.001	15.815	0.001	0.000
5	L-02	76	0.006	0.060	0.067	0.000	0.001	0.001	10.147	0.000	0.000
6	L-02	76	0.003	0.019	0.041	0.000	0.001	0.001	6.893	0.000	0.000
7	L-02	76	0.014	0.098	0.093	0.000	0.004	0.003	39.781	0.002	0.000
8	L-03	127	0.008	0.058	0.176	0.000	0.003	0.003	30.329	0.001	0.000
9	L-03	127	0.004	0.031	0.069	0.000	0.002	0.001	11.519	0.000	0.000
10	L-03	127	0.032	0.232	0.182	0.000	0.024	0.022	23.176	0.001	0.000
11	L-03	127	0.014	0.100	0.078	0.000	0.010	0.009	9.941	0.000	0.000
12	L-03	127	0.010	0.101	0.111	0.000	0.002	0.002	16.956	0.001	0.000
13	L-03	127	0.024	0.186	0.162	0.001	0.006	0.006	73.248	0.003	0.001
14	L-03	127	0.013	0.124	0.123	0.001	0.004	0.004	60.682	0.002	0.000
15	L-03	127	0.020	0.196	0.190	0.000	0.012	0.011	27.790	0.001	0.000
16	L-03	127	0.007	0.097	0.174	0.000	0.003	0.003	28.367	0.001	0.000
17	L-03	127	0.011	0.105	0.071	0.000	0.004	0.004	27.229	0.001	0.000
18	L-03	127	0.011	0.105	0.071	0.000	0.004	0.004	27.229	0.001	0.000
19	L-04	224	0.019	0.186	0.125	0.000	0.007	0.007	48.026	0.002	0.000
20	L-04	224	0.019	0.186	0.125	0.000	0.007	0.007	48.026	0.002	0.000
21	L-04	224	0.036	0.356	0.393	0.001	0.008	0.008	59.813	0.002	0.000
22	L-04	224	0.045	0.449	0.266	0.001	0.019	0.017	94.442	0.004	0.001
23	L-04	224	0.010	0.074	0.162	0.000	0.004	0.003	27.090	0.001	0.000
24	L-04	224	0.005	0.037	0.081	0.000	0.002	0.002	13.545	0.001	0.000
25	L-04	224	0.128	1.016	0.416	0.000	0.075	0.069	34.733	0.001	0.000
26	L-04	224	0.005	0.070	0.143	0.000	0.001	0.001	23.920	0.001	0.000
27	L-04	224	0.020	0.198	0.117	0.000	0.008	0.008	41.554	0.002	0.000
28	P-05	37	0.010	0.096	0.095	0.000	0.003	0.003	47.144	0.002	0.000
29	P-05	37	0.001	0.016	0.029	0.000	0.000	0.000	4.723	0.000	0.000
30	P-05	37	0.003	0.024	0.054	0.000	0.001	0.001	8.949	0.000	0.000
31	P-05	37	0.003	0.030	0.018	0.000	0.001	0.001	6.240	0.000	0.000
32	P-05	37	0.005	0.036	0.031	0.000	0.001	0.001	14.227	0.001	0.000

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
33	P-05	37	0.001	0.011	0.006	0.000	0.000	0.000	2.309	0.000	0.000
34	P-06	26	0.008	0.083	0.049	0.000	0.003	0.003	17.539	0.001	0.000
35	P-06	26	0.001	0.005	0.012	0.000	0.000	0.000	1.965	0.000	0.000
36	P-06	26	0.006	0.057	0.034	0.000	0.002	0.002	12.058	0.000	0.000
37	P-06	26	0.006	0.045	0.043	0.000	0.002	0.002	18.146	0.001	0.000
38	P-07	20	0.010	0.096	0.057	0.000	0.004	0.004	20.238	0.001	0.000
39	P-07	20	0.007	0.072	0.050	0.000	0.003	0.003	7.457	0.000	0.000
40	P-07	20	0.002	0.017	0.011	0.000	0.001	0.001	4.288	0.000	0.000
41	P-07	20	0.002	0.017	0.011	0.000	0.001	0.001	4.288	0.000	0.000
42	P-08	28	0.008	0.073	0.072	0.000	0.002	0.002	35.677	0.001	0.000
43	P-08	28	0.001	0.012	0.022	0.000	0.000	0.000	3.574	0.000	0.000
44	P-08	28	0.002	0.018	0.041	0.000	0.001	0.001	6.773	0.000	0.000
45	P-08	28	0.002	0.022	0.013	0.000	0.001	0.001	4.722	0.000	0.000
46	P-08	28	0.007	0.048	0.046	0.000	0.002	0.002	19.542	0.001	0.000
47	P-08	28	0.001	0.008	0.005	0.000	0.000	0.000	1.747	0.000	0.000
48	P-09	23	0.007	0.074	0.044	0.000	0.003	0.003	15.515	0.001	0.000
49	P-09	23	0.001	0.005	0.010	0.000	0.000	0.000	1.738	0.000	0.000
50	P-09	23	0.004	0.041	0.024	0.000	0.002	0.002	8.533	0.000	0.000
51	P-09	23	0.006	0.040	0.038	0.000	0.001	0.001	16.052	0.001	0.000
52	P-10	38	0.018	0.183	0.108	0.000	0.008	0.007	38.451	0.002	0.000
53	P-10	38	0.013	0.136	0.096	0.000	0.006	0.006	14.168	0.001	0.000
54	P-10	38	0.003	0.032	0.021	0.000	0.001	0.001	8.147	0.000	0.000
55	P-10	38	0.003	0.032	0.021	0.000	0.001	0.001	8.147	0.000	0.000
56	P-11	25	0.003	0.024	0.021	0.000	0.001	0.001	9.613	0.000	0.000
57	P-11	25	0.001	0.011	0.020	0.000	0.000	0.000	3.191	0.000	0.000
58	P-12	51	0.007	0.066	0.066	0.000	0.002	0.002	32.491	0.001	0.000
59	P-12	51	0.002	0.022	0.040	0.000	0.001	0.001	6.509	0.000	0.000
60	P-12	51	0.004	0.034	0.074	0.000	0.002	0.002	12.336	0.001	0.000
61	P-12	51	0.004	0.041	0.024	0.000	0.002	0.002	8.601	0.000	0.000
62	P-12	51	0.007	0.050	0.043	0.000	0.002	0.002	19.610	0.001	0.000
63	P-12	51	0.002	0.015	0.009	0.000	0.001	0.001	3.182	0.000	0.000
64	P-13	26	0.008	0.083	0.049	0.000	0.003	0.003	17.539	0.001	0.000
65	P-13	26	0.001	0.005	0.012	0.000	0.000	0.000	1.965	0.000	0.000

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
66	P-13	26	0.005	0.046	0.027	0.000	0.002	0.002	9.647	0.000	0.000
67	P-13	26	0.003	0.025	0.022	0.000	0.001	0.001	9.997	0.000	0.000
68	P-14	111	0.053	0.535	0.316	0.001	0.022	0.020	112.318	0.005	0.001
69	P-14	111	0.037	0.398	0.279	0.000	0.018	0.016	41.385	0.002	0.000
70	P-14	111	0.009	0.092	0.062	0.000	0.004	0.003	23.799	0.001	0.000
71	P-14	111	0.009	0.092	0.062	0.000	0.004	0.003	23.799	0.001	0.000
72	L-15	29	0.006	0.056	0.031	0.000	0.002	0.002	13.832	0.001	0.000
73	L-15	29	0.001	0.013	0.023	0.000	0.000	0.000	3.701	0.000	0.000
74	L-15	29	0.012	0.130	0.091	0.000	0.006	0.005	13.515	0.001	0.000
75	L-15	29	0.003	0.022	0.027	0.000	0.001	0.001	12.832	0.001	0.000
76	L-15	29	0.001	0.012	0.035	0.000	0.001	0.000	6.406	0.000	0.000
77	L-16	47	0.007	0.061	0.060	0.000	0.002	0.002	29.943	0.001	0.000
78	L-16	47	0.002	0.021	0.037	0.000	0.001	0.001	5.999	0.000	0.000
79	L-16	47	0.004	0.031	0.068	0.000	0.002	0.001	11.368	0.000	0.000
80	L-16	47	0.004	0.038	0.022	0.000	0.002	0.001	7.926	0.000	0.000
81	L-16	47	0.012	0.081	0.077	0.000	0.003	0.003	32.802	0.001	0.000
82	L-16	47	0.001	0.014	0.008	0.000	0.001	0.001	2.933	0.000	0.000
83	L-17	35	0.011	0.112	0.066	0.000	0.005	0.004	23.610	0.001	0.000
84	L-17	35	0.001	0.007	0.016	0.000	0.000	0.000	2.646	0.000	0.000
85	L-17	35	0.006	0.062	0.037	0.000	0.003	0.002	12.986	0.001	0.000
86	L-17	35	0.009	0.060	0.057	0.000	0.002	0.002	24.427	0.001	0.000
87	L-18	60	0.029	0.289	0.171	0.001	0.012	0.011	60.713	0.002	0.000
88	L-18	60	0.020	0.215	0.151	0.000	0.010	0.009	22.370	0.001	0.000
89	L-18	60	0.005	0.050	0.033	0.000	0.002	0.002	12.864	0.001	0.000
90	L-18	60	0.005	0.050	0.033	0.000	0.002	0.002	12.864	0.001	0.000
91	P-19	25	0.007	0.065	0.064	0.000	0.002	0.002	31.854	0.001	0.000
92	P-19	25	0.002	0.020	0.012	0.000	0.001	0.001	4.216	0.000	0.000
93	P-20	13	0.004	0.042	0.025	0.000	0.002	0.002	8.770	0.000	0.000
94	P-20	13	0.000	0.003	0.006	0.000	0.000	0.000	0.983	0.000	0.000
95	P-20	13	0.003	0.029	0.017	0.000	0.001	0.001	6.029	0.000	0.000
96	P-21	13	0.006	0.063	0.037	0.000	0.003	0.002	13.154	0.001	0.000
97	P-21	13	0.001	0.011	0.007	0.000	0.000	0.000	2.787	0.000	0.000
98	P-21	13	0.001	0.011	0.007	0.000	0.000	0.000	2.787	0.000	0.000

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
99	P-22	13	0.002	0.017	0.017	0.000	0.001	0.001	8.282	0.000	0.000
100	P-22	13	0.001	0.010	0.006	0.000	0.000	0.000	2.192	0.000	0.000
101	P-23	7	0.001	0.011	0.007	0.000	0.000	0.000	2.361	0.000	0.000
102	P-23	7	0.000	0.001	0.003	0.000	0.000	0.000	0.529	0.000	0.000
103	P-23	7	0.002	0.015	0.009	0.000	0.001	0.001	3.246	0.000	0.000
104	P-24	6	0.000	0.005	0.003	0.000	0.000	0.000	1.286	0.000	0.000
105	P-24	6	0.000	0.005	0.003	0.000	0.000	0.000	1.286	0.000	0.000
106	P-25	12	0.002	0.016	0.015	0.000	0.001	0.000	7.645	0.000	0.000
107	P-25	12	0.001	0.010	0.006	0.000	0.000	0.000	2.024	0.000	0.000
108	P-26	24	0.004	0.039	0.023	0.000	0.002	0.001	8.095	0.000	0.000
109	P-26	24	0.001	0.005	0.011	0.000	0.000	0.000	1.814	0.000	0.000
110	P-26	24	0.005	0.053	0.031	0.000	0.002	0.002	11.131	0.000	0.000
111	P-27	23	0.002	0.019	0.013	0.000	0.001	0.001	4.931	0.000	0.000
112	P-27	23	0.002	0.019	0.013	0.000	0.001	0.001	4.931	0.000	0.000
113	P-28	26	0.002	0.022	0.014	0.000	0.001	0.001	5.574	0.000	0.000
114	P-28	26	0.002	0.022	0.014	0.000	0.001	0.001	5.574	0.000	0.000
115	P-28	26	0.008	0.083	0.049	0.000	0.003	0.003	17.539	0.001	0.000
116	P-28	26	0.002	0.013	0.028	0.000	0.001	0.001	4.717	0.000	0.000
117	P-28	26	0.004	0.034	0.033	0.000	0.001	0.001	16.564	0.001	0.000
118	P-28	26	0.002	0.023	0.041	0.000	0.001	0.001	6.637	0.000	0.000
119	P-28	26	0.004	0.032	0.025	0.000	0.003	0.003	3.163	0.000	0.000
120	L-29	51	0.016	0.164	0.097	0.000	0.007	0.006	34.404	0.001	0.000
121	L-29	51	0.001	0.010	0.023	0.000	0.001	0.000	3.855	0.000	0.000
122	L-29	51	0.011	0.080	0.063	0.000	0.008	0.008	7.984	0.000	0.000
123	L-29	51	0.003	0.045	0.080	0.000	0.001	0.001	13.019	0.001	0.000
124	L-29	51	0.006	0.063	0.061	0.000	0.004	0.004	8.928	0.000	0.000
125	L-29	51	0.004	0.042	0.028	0.000	0.002	0.002	10.935	0.000	0.000
126	L-29	51	0.004	0.042	0.028	0.000	0.002	0.002	10.935	0.000	0.000
127	L-29	51	0.001	0.017	0.034	0.000	0.000	0.000	5.535	0.000	0.000
128	L-29	51	0.001	0.012	0.013	0.000	0.000	0.000	2.506	0.000	0.000
129	P-30	200	0.021	0.157	0.123	0.000	0.016	0.015	15.654	0.001	0.000
130	P-30	200	0.026	0.195	0.170	0.001	0.007	0.006	76.901	0.003	0.001
131	P-30	200	0.028	0.260	0.257	0.001	0.009	0.008	127.416	0.005	0.001

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
165	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167	L-39	52	0.000	0.004	0.008	0.000	0.000	0.000	1.388	0.000	0.000

Table 18: Off-Road Controlled Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	Cal/EModType	HP	LF	Year	EF ROG	EF NOX	EF CO	EF SO2	EF PM10	EF PM2.5	EF CO2	EF CH4	EF N2O	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-02	Site Development	Loader - 4.5 Yd	Diesel	2		5 Rubber Tired Loaders	230	0.36	2026	0.050	0.260	2.600	0.005	0.010	0.010	526.593	0.021	0.004	0.091	0.475	4.746	0.009	0.018	0.018	961.257	0.039	0.008
2	L-02	Site Development	Motor Grader	Diesel	2		5 Graders	250	0.41	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.697	0.021	0.004	0.113	1.588	5.875	0.011	0.023	0.023	1192.456	0.048	0.010
3	L-02	Site Development	Scraper	Diesel	2		5 Scrapers	410	0.48	2026	0.050	0.260	2.600	0.005	0.010	0.010	528.554	0.021	0.004	0.217	1.128	11.281	0.021	0.043	0.043	2294.535	0.093	0.019
4	L-02	Site Development	Vibratory Roller	Diesel	1		6 Rollers	157	0.38	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.368	0.021	0.004	0.089	0.205	2.920	0.004	0.008	0.008	416.181	0.017	0.003
5	L-02	Site Development	Generator - 25 Kw	Diesel	1		4 Generator Sets	36	0.74	2026	0.338	3.382	3.731	0.007	0.079	0.079	568.315	0.023	0.005	0.159	1.589	1.763	0.003	0.037	0.037	367.003	0.014	0.002
6	L-02	Site Development	Forklift - 15,000 lb	Diesel	1		6 Forklifts	130	0.2	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.017	0.089	1.273	0.002	0.003	0.003	181.407	0.007	0.001
7	L-02	Site Development	844 Loader	Diesel	1		8 Rubber Tired Loaders	417	0.36	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.198	0.021	0.004	0.099	0.516	5.163	0.010	0.020	0.020	1046.880	0.042	0.008
8	L-03	Below-Grade Construction	Excavator	Diesel	2		5 Excavators	108	0.38	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.886	0.021	0.004	0.045	0.235	3.348	0.004	0.009	0.009	477.618	0.019	0.004
9	L-03	Below-Grade Construction	Forklift - 15 K Reach	Diesel	1		6 Forklifts	130	0.2	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.017	0.089	1.273	0.002	0.003	0.003	181.407	0.007	0.001
10	L-03	Below-Grade Construction	Backhoe - 2X4	Diesel	2		6 Excavators	68	0.38	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.497	3.657	2.868	0.003	0.379	0.348	364.970	0.015	0.003
11	L-03	Below-Grade Construction	Excavator - Mini	Diesel	1		5 Excavators	70	0.38	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.213	1.569	1.230	0.001	0.162	0.149	156.544	0.006	0.001
12	L-03	Below-Grade Construction	Generator - 25 Kw	Diesel	1		4 Generator Sets	36	0.74	2026	0.338	3.382	3.731	0.007	0.079	0.079	568.315	0.023	0.005	0.159	1.589	1.763	0.003	0.037	0.037	367.003	0.014	0.002
13	L-03	Below-Grade Construction	Loader - 4.5 Yd	Diesel	2		8 Rubber Tired Loaders	230	0.36	2026	0.050	0.260	2.600	0.005	0.010	0.010	526.593	0.021	0.004	0.110	0.750	5.695	0.011	0.022	0.022	1153.508	0.047	0.009
14	L-03	Below-Grade Construction	Pressure Digger - Lo-Drill	T Diesel	1		6 Bore/Drill Rigs	275	0.5	2026	0.050	0.260	2.600	0.005	0.010	0.010	525.411	0.021	0.004	0.091	0.473	4.729	0.009	0.018	0.018	955.624	0.039	0.008
15	L-03	Below-Grade Construction	Trencher	Diesel	2		5 Trenchers	75	0.5	2026	0.378	3.782	3.617	0.005	0.232	0.232	529.355	0.021	0.004	0.312	3.082	2.991	0.004	0.191	0.176	437.635	0.018	0.004
16	L-03	Below-Grade Construction	Skid steer loader	Diesel	2		7 Skid Steer Loaders	74	0.37	2026	0.134	1.807	3.245	0.005	0.051	0.047	528.621	0.021	0.004	0.113	1.527	2.742	0.004	0.043	0.040	446.725	0.018	0.004
17	L-03	Below-Grade Construction	Wire Trailer / Tensioner	Diesel	1		5 Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
18	L-03	Below-Grade Construction	Wire Puller	Diesel	1		5 Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
19	L-04	Above-Grade Construction (Phase 1)	Wire Trailer / Tensioner	Diesel	1		5 Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
20	L-04	Above-Grade Construction (Phase 1)	Wire Puller	Diesel	1		5 Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
21	L-04	Above-Grade Construction (Phase 1)	Generator - 25 Kw	Diesel	2		4 Generator Sets	36	0.74	2026	0.338	3.382	3.731	0.007	0.079	0.079	568.315	0.023	0.005	0.159	1.589	1.763	0.003	0.037	0.037	367.003	0.014	0.002
22	L-04	Above-Grade Construction (Phase 1)	Crane - 35 Ton (Manlift)	Diesel	2		5 Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.080	0.416	4.156	0.008	0.016	0.016	843.231	0.034	0.007
23	L-04	Above-Grade Construction (Phase 1)	Forklift - 10 K Reach	Diesel	2		4 Forklifts	130	0.2	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.023	0.119	1.697	0.002	0.005	0.005	241.876	0.010	0.002
24	L-04	Above-Grade Construction (Phase 1)	Forklift - 15,000 lb	Diesel	1		4 Forklifts	130	0.2	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.011	0.060	0.848	0.001	0.002	0.002	120.938	0.005	0.001
25	L-04	Above-Grade Construction (Phase 1)	Loader - 4.5 Yd	Diesel	2		5 Rubber Tired Loaders	74	0.36	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.116	0.703	3.714	0.003	0.065	0.612	310.114	0.013	0.003
26	L-04	Above-Grade Construction (Phase 1)	120' Manlift	Diesel	2		4 Aerial Lifts	74	0.31	2026	0.103	1.553	3.162	0.005	0.031	0.028	527.871	0.021	0.004	0.042	0.628	1.279	0.002	0.012	0.011	213.572	0.009	0.002
27	L-04	Above-Grade Construction (Phase 1)	Crane - 200 Ton	Diesel	1		4 Cranes	275	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.035	0.183	1.829	0.003	0.007	0.007	371.021	0.015	0.003
28	P-05	Structure Foundation Installation	Pressure Digger - Lo-Drill	T Diesel	2		8 Bore/Drill Rigs	275	0.5	2026	0.050	0.260	2.600	0.005	0.010	0.010	525.411	0.021	0.004	0.243	1.261	12.610	0.024	0.049	0.049	2548.330	0.103	0.021
29	P-05	Structure Foundation Installation	Skid Steer loader	Diesel	1		8 Skid Steer Loaders	74	0.37	2026	0.134	1.807	3.245	0.005	0.051	0.047	528.621	0.021	0.004	0.065	0.873	1.567	0.002	0.025	0.023	255.271	0.010	0.002
30	P-05	Structure Foundation Installation	Forklift - 10 K Reach	Diesel	2		4 Forklifts	130	0.2	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.046	0.238	3.393	0.004	0.009	0.009	483.753	0.020	0.004
31	P-05	Structure Foundation Installation	Crane - 35 Ton (Manlift)	Diesel	2		4 Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.032	0.166	1.662	0.003	0.006	0.006	337.292	0.014	0.003
32	P-05	Structure Foundation Installation	Loader - 4.5 Yd	Diesel	1		8 Rubber Tired Loaders	230	0.36	2026	0.050	0.260	2.600	0.005	0.010	0.010	526.593	0.021	0.004	0.073	0.380	3.797	0.007	0.015	0.015	769.005	0.031	0.006
33	P-05	Structure Foundation Installation	Rough Terrain Crane	Diesel	1		2 Cranes	185	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.012	0.062	0.615	0.001	0.002	0.002	124.798	0.005	0.001
34	P-06	Structure Installation	Crane - 35 Ton (Manlift)	Diesel	2		8 Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.128	0.665	6.649	0.012	0.026	0.026	1349.169	0.055	0.011
35	P-06	Structure Installation	Forklift - 15,000 lb	Diesel	1		5 Forklifts	130	0.2	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.468	0.021	0.004	0.014	0.075	1.060	0.001	0.003	0.003	151.173	0.006	0.001
36	P-06	Structure Installation	Crane - 200 Ton	Diesel	2		5 Cranes	275	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.088	0.457	4.571	0.009	0.018	0.018	927.554	0.038	0.008
37	P-06	Structure Installation	844 Loader	Diesel	1		8 Rubber Tired Loaders	417	0.36	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.198	0.021	0.004	0.132	0.688	6.884	0.013	0.026	0.026	1395.840	0.057	0.011
38	P-07	Conductor Installation	Crane - 35 Ton (Manlift)	Diesel	6		4 Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.192	0.997	9.974	0.019	0.038	0.038	2023.753	0.082	0.016
39	P-07	Conductor Installation	DB Sag Dozer	Diesel	2		4 Rubber Tired Dozers	200	0.4	2026	0.050	0.260	2.600	0.005	0.010	0.010	528.489	0.021	0.004	0.071	0.367	3.668	0.007	0.014	0.014	745.675	0.030	0.006
40	P-07	Conductor Installation	Wire Puller	Diesel	1		5 Other Construction Equipment	175	0.42</																			

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	Cal/EEModType	HP	LF	Year	EF_ROG	EF_NOX	EF_CO	EF_SO2	EF_PM10	EF_PM2.5	EF_CO2	EF_CH4	EF_N2O	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
90	L-18	Conductor Installation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
91	P-19	Structure Foundation Installation	Pressure Digger - Lo-Drill (T)	Diesel	2	8	Bore/Drill Rigs	275	0.5	2026	0.050	0.260	2.600	0.005	0.010	0.010	525.411	0.021	0.004	0.243	1.261	12.610	0.024	0.049	0.049	2548.330	0.103	0.021
92	P-19	Structure Foundation Installation	Crane - 35 Ton (Manlift)	Diesel	1	4	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.032	0.166	1.662	0.003	0.006	0.006	337.292	0.014	0.003
93	P-20	Structure Installation	Crane - 35 Ton (Manlift)	Diesel	2	8	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.128	0.665	6.649	0.012	0.026	0.026	1349.169	0.055	0.011
94	P-20	Structure Installation	Forklifts - 15,000 lb	Diesel	1	5	Forklifts	130	0.2	2026	0.050	0.260	3.700	0.005	0.010	0.010	527.468	0.021	0.004	0.014	0.075	1.060	0.001	0.003	0.003	151.173	0.006	0.001
95	P-20	Structure Installation	Crane - 200 Ton	Diesel	2	5	Cranes	275	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.088	0.457	4.571	0.009	0.018	0.018	927.554	0.038	0.008
96	P-21	Conductor Installation	Crane - 35 Ton (Manlift)	Diesel	6	4	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.192	0.997	9.974	0.019	0.038	0.038	2023.753	0.082	0.016
97	P-21	Conductor Installation	Wire Puller	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
98	P-21	Conductor Installation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
99	P-22	Structure Foundation Installation	Pressure Digger - Lo-Drill (T)	Diesel	1	8	Bore/Drill Rigs	275	0.5	2026	0.050	0.260	2.600	0.005	0.010	0.010	525.411	0.021	0.004	0.121	0.631	6.305	0.012	0.024	0.024	1274.165	0.052	0.010
100	P-22	Structure Foundation Installation	Crane - 35 Ton (Manlift)	Diesel	1	4	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.032	0.166	1.662	0.003	0.006	0.006	337.292	0.014	0.003
101	P-23	Structure Installation	Crane - 35 Ton (Manlift)	Diesel	1	4	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.064	0.332	3.325	0.006	0.013	0.013	674.584	0.027	0.005
102	P-23	Structure Installation	Forklifts - 15,000 lb	Diesel	1	5	Forklifts	130	0.2	2026	0.050	0.260	3.700	0.005	0.010	0.010	527.468	0.021	0.004	0.014	0.075	1.060	0.001	0.003	0.003	151.173	0.006	0.001
103	P-23	Structure Installation	Crane - 200 Ton	Diesel	2	5	Cranes	275	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.088	0.457	4.571	0.009	0.018	0.018	927.554	0.038	0.008
104	P-24	Conductor Installation	Wire Puller	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
105	P-24	Conductor Installation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
106	P-25	Structure Foundation Installation	Pressure Digger - Lo-Drill (T)	Diesel	1	8	Bore/Drill Rigs	275	0.5	2026	0.050	0.260	2.600	0.005	0.010	0.010	525.411	0.021	0.004	0.121	0.631	6.305	0.012	0.024	0.024	1274.165	0.052	0.010
107	P-25	Structure Foundation Installation	Crane - 35 Ton (Manlift)	Diesel	1	4	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.032	0.166	1.662	0.003	0.006	0.006	337.292	0.014	0.003
108	P-26	Structure Installation	Crane - 35 Ton (Manlift)	Diesel	1	4	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.064	0.332	3.325	0.006	0.013	0.013	674.584	0.027	0.005
109	P-26	Structure Installation	Forklift - 15,000 lb	Diesel	1	5	Forklifts	130	0.2	2026	0.050	0.260	3.700	0.005	0.010	0.010	527.468	0.021	0.004	0.014	0.075	1.060	0.001	0.003	0.003	151.173	0.006	0.001
110	P-26	Structure Installation	Crane - 200 Ton	Diesel	2	5	Cranes	275	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.088	0.457	4.571	0.009	0.018	0.018	927.554	0.038	0.008
111	P-27	Conductor Installation	Wire Puller	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
112	P-27	Conductor Installation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
113	P-28	Distribution Extension to Substation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
114	P-28	Distribution Extension to Substation	Wire Puller	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
115	P-28	Distribution Extension to Substation	Crane - 35 Ton (Manlift)	Diesel	2	8	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.128	0.665	6.649	0.012	0.026	0.026	1349.169	0.055	0.011
116	P-28	Distribution Extension to Substation	Forklift - 15 K Reach	Diesel	2	6	Forklifts	130	0.2	2026	0.050	0.260	3.700	0.005	0.010	0.010	527.468	0.021	0.004	0.034	0.179	2.545	0.003	0.007	0.007	362.814	0.015	0.003
117	P-28	Distribution Extension to Substation	Pressure Digger - Lo-Drill (T)	Diesel	1	8	Bore/Drill Rigs	275	0.5	2026	0.050	0.260	2.600	0.005	0.010	0.010	525.411	0.021	0.004	0.121	0.631	6.305	0.012	0.024	0.024	1274.165	0.052	0.010
118	P-28	Distribution Extension to Substation	Skid steer loader	Diesel	2	8	Skid Steer Loaders	74	0.37	2026	0.134	1.807	3.245	0.005	0.051	0.047	528.621	0.021	0.004	0.129	1.745	3.134	0.005	0.050	0.046	510.542	0.021	0.004
119	P-28	Distribution Extension to Substation	Backhoe - 2M	Diesel	1	8	Excavators	68	0.38	2026	0.727	5.350	4.195	0.005	0.554	0.509	533.887	0.022	0.004	0.332	2.438	1.912	0.002	0.252	0.222	248.333	0.010	0.002
120	L-29	Fiber Extension to Substation	Crane - 35 Ton (Manlift)	Diesel	1	4	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.128	0.665	6.649	0.012	0.026	0.026	1349.169	0.055	0.011
121	L-29	Fiber Extension to Substation	Forklift - 10 K Reach	Diesel	1	5	Forklifts	130	0.2	2026	0.050	0.260	3.700	0.005	0.010	0.010	527.468	0.021	0.004	0.014	0.075	1.060	0.001	0.003	0.003	151.173	0.006	0.001
122	L-29	Fiber Extension to Substation	Excavator - Mini	Diesel	2	5	Excavators	70	0.38	2026	0.727	5.350	4.195	0.005	0.554	0.509	533.887	0.022	0.004	0.427	3.137	2.460	0.003	0.325	0.299	313.087	0.013	0.003
123	L-29	Fiber Extension to Substation	Skid steer loader	Diesel	2	8	Skid Steer Loaders	74	0.37	2026	0.134	1.807	3.245	0.005	0.051	0.047	528.621	0.021	0.004	0.129	1.745	3.134	0.005	0.050	0.046	510.542	0.021	0.004
124	L-29	Fiber Extension to Substation	Trencher	Diesel	1	7	Trenchers	75	0.5	2026	0.378	3.728	3.617	0.005	0.232	0.213	529.355	0.021	0.004	0.250	2.465	2.392	0.003	0.153	0.141	350.108	0.014	0.003
125	L-29	Fiber Extension to Substation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
126	L-29	Fiber Extension to Substation	Wire Puller	Diesel	1	5	Other Construction Equipment	175	0.42	2026	0.050	0.260	2.600	0.005	0.010	0.010	529.258	0.021	0.004	0.041	0.211	2.107	0.004	0.008	0.008	428.804	0.017	0.003
127	L-29	Fiber Extension to Substation	HDD machine	Diesel	1	5	Bore/Drill Rigs	75	0.5	2026	0.128	1.639	3.253	0.005	0.040	0.037	525.082	0.021	0.004	0.053	0.678	1.344	0.002	0.017	0.015	217.051	0.009	0.002
128	L-29	Fiber Extension to Substation	Manlift - 40'	Diesel	1	4	Manlifts	49	0.31	2026	0.152	2.874	3.075	0.005	0.021	0.019	586.900	0.024	0.005	0.026	0.481	3.545	0.001	0.003	0.003	98.271	0.004	0.001
129	P-30	Tranquility Outdoor	Excavator - Mini	Diesel	1	5	Excavators	70	0.38	2026	0.727	5.350	4.195	0.005	0.554	0.509	533.887	0.022	0.004	0.213	1.569	1.230	0.001	0.162	0.149	156.544	0.006	0.001
130	P-30	Tranquility Outdoor	Loader - 4.5 Yd	Diesel	1	8	Rubber Tired Loaders	230	0.36	2026	0.050	0.260	2.600	0.005	0.010	0.010	526.593	0.021	0.004	0.073	0.380	3.797	0.007	0.015	0.015	769.005	0.031	0.006
131	P-30	Tranquility Outdoor	Pressure Digger - Lo-Drill (T)	Diesel	1	8	Bore/Drill Rigs	275	0.5	2026	0.050	0.260	2.600	0.005	0.010	0.010	525.411	0.021	0.004	0.121	0.631	6.305	0.012	0.024	0.024	1274.165	0.052	0.010
132	P-30	Tranquility Outdoor	Crane - 35 Ton (Manlift)	Diesel	2	8	Cranes	250	0.29	2026	0.050	0.260	2.600	0.005	0.010	0.010	527.563	0.021	0.004	0.128	0.665	6.649	0.012	0.026	0.026	1349.169	0.055	0.011
133	P-30	Tranquility Outdoor	Forklifts - 15,000 lb	Diesel	1	4	Forklifts	130	0.2	2026	0.050	0.260	3.700	0.005	0.010	0.010	527.468	0.021	0.004	0.014	0.075	1.060						

Table 19: Off-Road Controlled Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-02	76	0.003	0.018	0.180	0.000	0.001	0.001	36.528	0.001	0.000
2	L-02	76	0.004	0.022	0.223	0.000	0.001	0.001	45.313	0.002	0.000
3	L-02	76	0.008	0.043	0.429	0.001	0.002	0.002	87.192	0.004	0.001
4	L-02	76	0.001	0.008	0.111	0.000	0.000	0.000	15.815	0.001	0.000
5	L-02	76	0.006	0.060	0.067	0.000	0.001	0.001	10.147	0.000	0.000
6	L-02	76	0.001	0.003	0.048	0.000	0.000	0.000	6.893	0.000	0.000
7	L-02	76	0.004	0.020	0.196	0.000	0.001	0.001	39.781	0.002	0.000
8	L-03	127	0.003	0.015	0.213	0.000	0.001	0.001	30.329	0.001	0.000
9	L-03	127	0.001	0.006	0.081	0.000	0.000	0.000	11.519	0.000	0.000
10	L-03	127	0.032	0.232	0.182	0.000	0.024	0.022	23.176	0.001	0.000
11	L-03	127	0.014	0.100	0.078	0.000	0.010	0.009	9.941	0.000	0.000
12	L-03	127	0.010	0.101	0.111	0.000	0.002	0.002	16.956	0.001	0.000
13	L-03	127	0.007	0.036	0.362	0.001	0.001	0.001	73.248	0.003	0.001
14	L-03	127	0.006	0.030	0.300	0.001	0.001	0.001	60.682	0.002	0.000
15	L-03	127	0.020	0.196	0.190	0.000	0.012	0.011	27.790	0.001	0.000
16	L-03	127	0.007	0.097	0.174	0.000	0.003	0.003	28.367	0.001	0.000
17	L-03	127	0.003	0.013	0.134	0.000	0.001	0.001	27.229	0.001	0.000
18	L-03	127	0.003	0.013	0.134	0.000	0.001	0.001	27.229	0.001	0.000
19	L-04	224	0.005	0.024	0.236	0.000	0.001	0.001	48.026	0.002	0.000
20	L-04	224	0.005	0.024	0.236	0.000	0.001	0.001	48.026	0.002	0.000
21	L-04	224	0.036	0.356	0.393	0.001	0.008	0.008	59.813	0.002	0.000
22	L-04	224	0.009	0.047	0.465	0.001	0.002	0.002	94.442	0.004	0.001
23	L-04	224	0.003	0.013	0.190	0.000	0.001	0.001	27.090	0.001	0.000
24	L-04	224	0.001	0.007	0.095	0.000	0.000	0.000	13.545	0.001	0.000
25	L-04	224	0.128	1.016	0.416	0.000	0.075	0.069	34.733	0.001	0.000
26	L-04	224	0.005	0.070	0.143	0.000	0.001	0.001	23.920	0.001	0.000
27	L-04	224	0.004	0.020	0.205	0.000	0.001	0.001	41.554	0.002	0.000
28	P-05	37	0.004	0.023	0.233	0.000	0.001	0.001	47.144	0.002	0.000
29	P-05	37	0.001	0.016	0.029	0.000	0.000	0.000	4.723	0.000	0.000
30	P-05	37	0.001	0.004	0.063	0.000	0.000	0.000	8.949	0.000	0.000
31	P-05	37	0.001	0.003	0.031	0.000	0.000	0.000	6.240	0.000	0.000
32	P-05	37	0.001	0.007	0.070	0.000	0.000	0.000	14.227	0.001	0.000
33	P-05	37	0.000	0.001	0.011	0.000	0.000	0.000	2.309	0.000	0.000

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
34	P-06	26	0.002	0.009	0.086	0.000	0.000	0.000	17.539	0.001	0.000
35	P-06	26	0.000	0.001	0.014	0.000	0.000	0.000	1.965	0.000	0.000
36	P-06	26	0.001	0.006	0.059	0.000	0.000	0.000	12.058	0.000	0.000
37	P-06	26	0.002	0.009	0.089	0.000	0.000	0.000	18.146	0.001	0.000
38	P-07	20	0.002	0.010	0.100	0.000	0.000	0.000	20.238	0.001	0.000
39	P-07	20	0.001	0.004	0.037	0.000	0.000	0.000	7.457	0.000	0.000
40	P-07	20	0.000	0.002	0.021	0.000	0.000	0.000	4.288	0.000	0.000
41	P-07	20	0.000	0.002	0.021	0.000	0.000	0.000	4.288	0.000	0.000
42	P-08	28	0.003	0.018	0.177	0.000	0.001	0.001	35.677	0.001	0.000
43	P-08	28	0.001	0.012	0.022	0.000	0.000	0.000	3.574	0.000	0.000
44	P-08	28	0.001	0.003	0.048	0.000	0.000	0.000	6.773	0.000	0.000
45	P-08	28	0.000	0.002	0.023	0.000	0.000	0.000	4.722	0.000	0.000
46	P-08	28	0.002	0.010	0.096	0.000	0.000	0.000	19.542	0.001	0.000
47	P-08	28	0.000	0.001	0.009	0.000	0.000	0.000	1.747	0.000	0.000
48	P-09	23	0.001	0.008	0.076	0.000	0.000	0.000	15.515	0.001	0.000
49	P-09	23	0.000	0.001	0.012	0.000	0.000	0.000	1.738	0.000	0.000
50	P-09	23	0.001	0.004	0.042	0.000	0.000	0.000	8.533	0.000	0.000
51	P-09	23	0.002	0.008	0.079	0.000	0.000	0.000	16.052	0.001	0.000
52	P-10	38	0.004	0.019	0.190	0.000	0.001	0.001	38.451	0.002	0.000
53	P-10	38	0.001	0.007	0.070	0.000	0.000	0.000	14.168	0.001	0.000
54	P-10	38	0.001	0.004	0.040	0.000	0.000	0.000	8.147	0.000	0.000
55	P-10	38	0.001	0.004	0.040	0.000	0.000	0.000	8.147	0.000	0.000
56	P-11	25	0.001	0.005	0.047	0.000	0.000	0.000	9.613	0.000	0.000
57	P-11	25	0.001	0.011	0.020	0.000	0.000	0.000	3.191	0.000	0.000
58	P-12	51	0.003	0.016	0.161	0.000	0.001	0.001	32.491	0.001	0.000
59	P-12	51	0.002	0.022	0.040	0.000	0.001	0.001	6.509	0.000	0.000
60	P-12	51	0.001	0.006	0.087	0.000	0.000	0.000	12.336	0.001	0.000
61	P-12	51	0.001	0.004	0.042	0.000	0.000	0.000	8.601	0.000	0.000
62	P-12	51	0.002	0.010	0.097	0.000	0.000	0.000	19.610	0.001	0.000
63	P-12	51	0.000	0.002	0.016	0.000	0.000	0.000	3.182	0.000	0.000
64	P-13	26	0.002	0.009	0.086	0.000	0.000	0.000	17.539	0.001	0.000
65	P-13	26	0.000	0.001	0.014	0.000	0.000	0.000	1.965	0.000	0.000
66	P-13	26	0.001	0.005	0.048	0.000	0.000	0.000	9.647	0.000	0.000
67	P-13	26	0.001	0.005	0.049	0.000	0.000	0.000	9.997	0.000	0.000

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
68	P-14	111	0.011	0.055	0.554	0.001	0.002	0.002	112.318	0.005	0.001
69	P-14	111	0.004	0.020	0.204	0.000	0.001	0.001	41.385	0.002	0.000
70	P-14	111	0.002	0.012	0.117	0.000	0.000	0.000	23.799	0.001	0.000
71	P-14	111	0.002	0.012	0.117	0.000	0.000	0.000	23.799	0.001	0.000
72	L-15	29	0.001	0.007	0.068	0.000	0.000	0.000	13.832	0.001	0.000
73	L-15	29	0.001	0.013	0.023	0.000	0.000	0.000	3.701	0.000	0.000
74	L-15	29	0.001	0.007	0.066	0.000	0.000	0.000	13.515	0.001	0.000
75	L-15	29	0.001	0.006	0.063	0.000	0.000	0.000	12.832	0.001	0.000
76	L-15	29	0.001	0.003	0.045	0.000	0.000	0.000	6.406	0.000	0.000
77	L-16	47	0.003	0.015	0.148	0.000	0.001	0.001	29.943	0.001	0.000
78	L-16	47	0.002	0.021	0.037	0.000	0.001	0.001	5.999	0.000	0.000
79	L-16	47	0.001	0.006	0.080	0.000	0.000	0.000	11.368	0.000	0.000
80	L-16	47	0.001	0.004	0.039	0.000	0.000	0.000	7.926	0.000	0.000
81	L-16	47	0.003	0.016	0.162	0.000	0.001	0.001	32.802	0.001	0.000
82	L-16	47	0.000	0.001	0.014	0.000	0.000	0.000	2.933	0.000	0.000
83	L-17	35	0.002	0.012	0.116	0.000	0.000	0.000	23.610	0.001	0.000
84	L-17	35	0.000	0.001	0.019	0.000	0.000	0.000	2.646	0.000	0.000
85	L-17	35	0.001	0.006	0.064	0.000	0.000	0.000	12.986	0.001	0.000
86	L-17	35	0.002	0.012	0.120	0.000	0.000	0.000	24.427	0.001	0.000
87	L-18	60	0.006	0.030	0.299	0.001	0.001	0.001	60.713	0.002	0.000
88	L-18	60	0.002	0.011	0.110	0.000	0.000	0.000	22.370	0.001	0.000
89	L-18	60	0.001	0.006	0.063	0.000	0.000	0.000	12.864	0.001	0.000
90	L-18	60	0.001	0.006	0.063	0.000	0.000	0.000	12.864	0.001	0.000
91	P-19	25	0.003	0.016	0.158	0.000	0.001	0.001	31.854	0.001	0.000
92	P-19	25	0.000	0.002	0.021	0.000	0.000	0.000	4.216	0.000	0.000
93	P-20	13	0.001	0.004	0.043	0.000	0.000	0.000	8.770	0.000	0.000
94	P-20	13	0.000	0.000	0.007	0.000	0.000	0.000	0.983	0.000	0.000
95	P-20	13	0.001	0.003	0.030	0.000	0.000	0.000	6.029	0.000	0.000
96	P-21	13	0.001	0.006	0.065	0.000	0.000	0.000	13.154	0.001	0.000
97	P-21	13	0.000	0.001	0.014	0.000	0.000	0.000	2.787	0.000	0.000
98	P-21	13	0.000	0.001	0.014	0.000	0.000	0.000	2.787	0.000	0.000
99	P-22	13	0.001	0.004	0.041	0.000	0.000	0.000	8.282	0.000	0.000
100	P-22	13	0.000	0.001	0.011	0.000	0.000	0.000	2.192	0.000	0.000
101	P-23	7	0.000	0.001	0.012	0.000	0.000	0.000	2.361	0.000	0.000

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
102	P-23	7	0.000	0.000	0.004	0.000	0.000	0.000	0.529	0.000	0.000
103	P-23	7	0.000	0.002	0.016	0.000	0.000	0.000	3.246	0.000	0.000
104	P-24	6	0.000	0.001	0.006	0.000	0.000	0.000	1.286	0.000	0.000
105	P-24	6	0.000	0.001	0.006	0.000	0.000	0.000	1.286	0.000	0.000
106	P-25	12	0.001	0.004	0.038	0.000	0.000	0.000	7.645	0.000	0.000
107	P-25	12	0.000	0.001	0.010	0.000	0.000	0.000	2.024	0.000	0.000
108	P-26	24	0.001	0.004	0.040	0.000	0.000	0.000	8.095	0.000	0.000
109	P-26	24	0.000	0.001	0.013	0.000	0.000	0.000	1.814	0.000	0.000
110	P-26	24	0.001	0.005	0.055	0.000	0.000	0.000	11.131	0.000	0.000
111	P-27	23	0.000	0.002	0.024	0.000	0.000	0.000	4.931	0.000	0.000
112	P-27	23	0.000	0.002	0.024	0.000	0.000	0.000	4.931	0.000	0.000
113	P-28	26	0.001	0.003	0.027	0.000	0.000	0.000	5.574	0.000	0.000
114	P-28	26	0.001	0.003	0.027	0.000	0.000	0.000	5.574	0.000	0.000
115	P-28	26	0.002	0.009	0.086	0.000	0.000	0.000	17.539	0.001	0.000
116	P-28	26	0.000	0.002	0.033	0.000	0.000	0.000	4.717	0.000	0.000
117	P-28	26	0.002	0.008	0.082	0.000	0.000	0.000	16.564	0.001	0.000
118	P-28	26	0.002	0.023	0.041	0.000	0.001	0.001	6.637	0.000	0.000
119	P-28	26	0.004	0.032	0.025	0.000	0.003	0.003	3.163	0.000	0.000
120	L-29	51	0.003	0.017	0.170	0.000	0.001	0.001	34.404	0.001	0.000
121	L-29	51	0.000	0.002	0.027	0.000	0.000	0.000	3.855	0.000	0.000
122	L-29	51	0.011	0.080	0.063	0.000	0.008	0.008	7.984	0.000	0.000
123	L-29	51	0.003	0.045	0.080	0.000	0.001	0.001	13.019	0.001	0.000
124	L-29	51	0.006	0.063	0.061	0.000	0.004	0.004	8.928	0.000	0.000
125	L-29	51	0.001	0.005	0.054	0.000	0.000	0.000	10.935	0.000	0.000
126	L-29	51	0.001	0.005	0.054	0.000	0.000	0.000	10.935	0.000	0.000
127	L-29	51	0.001	0.017	0.034	0.000	0.000	0.000	5.535	0.000	0.000
128	L-29	51	0.001	0.012	0.013	0.000	0.000	0.000	2.506	0.000	0.000
129	P-30	200	0.021	0.157	0.123	0.000	0.016	0.015	15.654	0.001	0.000
130	P-30	200	0.007	0.038	0.380	0.001	0.001	0.001	76.901	0.003	0.001
131	P-30	200	0.012	0.063	0.631	0.001	0.002	0.002	127.416	0.005	0.001
132	P-30	200	0.013	0.066	0.665	0.001	0.003	0.003	134.917	0.005	0.001
133	P-30	200	0.001	0.006	0.085	0.000	0.000	0.000	12.094	0.000	0.000
134	P-30	200	0.012	0.231	0.247	0.000	0.002	0.002	47.170	0.002	0.000
135	P-30	200	0.004	0.063	0.128	0.000	0.001	0.001	21.357	0.001	0.000

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
136	P-31	148	0.005	0.025	0.246	0.000	0.001	0.001	49.919	0.002	0.000
137	P-31	148	0.001	0.004	0.063	0.000	0.000	0.000	8.949	0.000	0.000
138	P-31	148	0.009	0.171	0.183	0.000	0.001	0.001	34.906	0.001	0.000
139	P-31	148	0.003	0.047	0.095	0.000	0.001	0.001	15.804	0.001	0.000
140	P-32	200	0.021	0.157	0.123	0.000	0.016	0.015	15.654	0.001	0.000
141	P-32	200	0.007	0.038	0.380	0.001	0.001	0.001	76.901	0.003	0.001
142	P-32	200	0.012	0.063	0.631	0.001	0.002	0.002	127.416	0.005	0.001
143	P-32	200	0.013	0.066	0.665	0.001	0.003	0.003	134.917	0.005	0.001
144	P-32	200	0.001	0.006	0.085	0.000	0.000	0.000	12.094	0.000	0.000
145	P-32	200	0.012	0.231	0.247	0.000	0.002	0.002	47.170	0.002	0.000
146	P-32	200	0.004	0.063	0.128	0.000	0.001	0.001	21.357	0.001	0.000
147	P-33	150	0.005	0.025	0.249	0.000	0.001	0.001	50.594	0.002	0.000
148	P-33	150	0.001	0.004	0.064	0.000	0.000	0.000	9.070	0.000	0.000
149	P-33	150	0.009	0.173	0.185	0.000	0.001	0.001	35.378	0.001	0.000
150	P-33	150	0.003	0.047	0.096	0.000	0.001	0.001	16.018	0.001	0.000
151	P-36	77	0.002	0.013	0.128	0.000	0.000	0.000	25.971	0.001	0.000
152	P-36	77	0.000	0.002	0.033	0.000	0.000	0.000	4.656	0.000	0.000
153	P-36	77	0.005	0.089	0.095	0.000	0.001	0.001	18.161	0.001	0.000
154	P-36	77	0.002	0.024	0.049	0.000	0.000	0.000	8.223	0.000	0.000
155	L-37	198	0.004	0.021	0.206	0.000	0.001	0.001	41.740	0.002	0.000
156	L-38	140	0.005	0.061	0.110	0.000	0.002	0.002	17.869	0.001	0.000
157	L-38	140	0.006	0.030	0.305	0.001	0.001	0.001	61.948	0.003	0.001
158	L-38	140	0.006	0.032	0.321	0.001	0.001	0.001	65.247	0.003	0.001
159	L-38	140	0.006	0.033	0.329	0.001	0.001	0.001	66.778	0.003	0.001
160	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
161	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162	L-39	52	0.010	0.103	0.114	0.000	0.002	0.002	17.356	0.001	0.000
163	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
164	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
166	L-39	52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167	L-39	52	0.000	0.004	0.008	0.000	0.000	0.000	1.388	0.000	0.000

Table 21: On-Road Uncontrolled Exhaust Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-01	51	0.000762	0.001184	0.014689	3.51E-05	0.000198	7.05E-05	3.550705	7.3E-05	9.58E-05
2	L-02	76	0.000167	0.00869	0.001687	7.34E-05	0.000451	0.000192	7.747361	7.77E-06	0.001221
3	L-02	76	0.001254	0.039154	0.016129	0.000263	0.002369	0.001063	27.75863	5.82E-05	0.004373
4	L-02	76	0.002271	0.003529	0.04378	0.000105	0.000591	0.00021	10.58249	0.000218	0.000286
5	L-02	76	0.005006	0.028118	0.034091	0.000105	0.004507	0.00395	11.04429	0.000232	0.00174
6	L-02	76	0.000627	0.019577	0.008064	0.000131	0.001185	0.000532	13.87932	2.91E-05	0.002187
7	L-03	127	0.00028	0.014521	0.002818	0.000123	0.000754	0.000321	12.94625	1.3E-05	0.00204
8	L-03	127	0.003794	0.005896	0.073159	0.000175	0.000987	0.000351	17.6839	0.000363	0.000477
9	L-03	127	0.008364	0.046986	0.056968	0.000175	0.007531	0.006601	18.45558	0.000389	0.002908
10	L-03	127	0.004191	0.130858	0.053904	0.000878	0.007919	0.003554	92.77227	0.000195	0.014616
11	L-03	127	0.003143	0.098144	0.040428	0.000659	0.005939	0.002665	69.5792	0.000146	0.010962
12	L-04	224	0.006692	0.0104	0.129036	0.000308	0.001741	0.000619	31.19051	0.000641	0.000842
13	L-04	224	0.014753	0.082873	0.100478	0.000308	0.013283	0.011642	32.55158	0.000685	0.005129
14	L-04	224	0.001087	0.05392	0.007524	0.000527	0.003313	0.001404	55.64	5.05E-05	0.008766
15	P-05	37	0.001221	0.038124	0.015704	0.000256	0.002307	0.001035	27.02814	5.67E-05	0.004258
16	P-05	37	0.002437	0.013689	0.016597	5.09E-05	0.002194	0.001923	5.376824	0.000113	0.000847
17	P-05	37	8.15E-05	0.004231	0.000821	3.57E-05	0.00022	9.36E-05	3.771741	3.78E-06	0.000594
18	P-05	37	0.00061	0.019062	0.007852	0.000128	0.001153	0.000518	13.51407	2.84E-05	0.002129
19	P-06	26	0.000388	0.000604	0.007489	1.79E-05	0.000101	3.6E-05	1.810163	3.72E-05	4.89E-05
20	P-06	26	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
21	P-06	26	5.73E-05	0.002973	0.000577	2.51E-05	0.000154	6.58E-05	2.650413	2.66E-06	0.000418
22	P-07	20	4.85E-05	0.002407	0.000336	2.35E-05	0.000148	6.27E-05	2.483928	2.25E-06	0.000391
23	P-07	20	0.000598	0.000929	0.011521	2.75E-05	0.000155	5.53E-05	2.784867	5.72E-05	7.52E-05
24	P-07	20	0.001317	0.007399	0.008971	2.75E-05	0.001186	0.001039	2.906391	6.12E-05	0.000458
25	P-07	20	4.4E-05	0.002287	0.000444	1.93E-05	0.000119	5.06E-05	2.038779	2.05E-06	0.000321
26	P-08	28	0.000924	0.028851	0.011884	0.000194	0.001746	0.000784	20.45373	4.29E-05	0.003222
27	P-08	28	0.001844	0.010359	0.01256	3.86E-05	0.00166	0.001455	4.068948	8.57E-05	0.000641
28	P-08	28	6.17E-05	0.003202	0.000621	2.7E-05	0.000166	7.08E-05	2.854291	2.86E-06	0.00045
29	P-08	28	0.000462	0.014425	0.005942	9.68E-05	0.000873	0.000392	10.22686	2.15E-05	0.001611
30	P-09	23	0.000344	0.000534	0.006625	1.58E-05	8.94E-05	3.18E-05	1.601298	3.29E-05	4.32E-05
31	P-09	23	0.000757	0.004255	0.005158	1.58E-05	0.000682	0.000598	1.671175	3.52E-05	0.000263
32	P-09	23	5.06E-05	0.00263	0.00051	2.22E-05	0.000137	5.82E-05	2.344596	2.35E-06	0.000369
33	P-10	38	9.22E-05	0.004574	0.000638	4.47E-05	0.000281	0.000119	4.719464	4.28E-06	0.000744

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
34	P-10	38	0.001135	0.001764	0.02189	5.23E-05	0.000295	0.000105	5.291247	0.000109	0.000143
35	P-10	38	0.002503	0.014059	0.017045	5.23E-05	0.002253	0.001975	5.522143	0.000116	0.00087
36	P-10	38	8.37E-05	0.004345	0.000843	3.67E-05	0.000226	9.61E-05	3.87368	3.89E-06	0.00061
37	P-11	25	0.000823	0.004625	0.005607	1.72E-05	0.000741	0.00065	1.816494	3.82E-05	0.000286
38	P-12	51	0.001683	0.052549	0.021646	0.000353	0.00318	0.001427	37.255	7.82E-05	0.00587
39	P-12	51	0.003359	0.018868	0.022877	7.02E-05	0.003024	0.002651	7.411297	0.000156	0.001168
40	P-12	51	0.000112	0.005831	0.001132	4.92E-05	0.000303	0.000129	5.198887	5.22E-06	0.000819
41	P-12	51	0.000841	0.026275	0.010823	0.000176	0.00159	0.000714	18.6275	3.91E-05	0.002935
42	P-13	26	0.000388	0.000604	0.007489	1.79E-05	0.000101	3.6E-05	1.810163	3.72E-05	4.89E-05
43	P-13	26	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
44	P-13	26	5.73E-05	0.002973	0.000577	2.51E-05	0.000154	6.58E-05	2.650413	2.66E-06	0.000418
45	P-14	111	0.000269	0.01336	0.001864	0.000131	0.000821	0.000348	13.7858	1.25E-05	0.002172
46	P-14	111	0.003316	0.005154	0.063942	0.000153	0.000863	0.000307	15.45601	0.000318	0.000417
47	P-14	111	0.007311	0.041066	0.049791	0.000153	0.006582	0.005769	16.13047	0.00034	0.002541
48	P-14	111	0.000244	0.012692	0.002463	0.000107	0.000659	0.000281	11.31522	1.14E-05	0.001783
49	L-15	29	0.000433	0.000673	0.008353	2E-05	0.000113	4.01E-05	2.019028	4.15E-05	5.45E-05
50	L-15	29	0.000955	0.005365	0.006504	2E-05	0.00086	0.000754	2.107134	4.44E-05	0.000332
51	L-15	29	0.000478	0.014941	0.006154	0.0001	0.000904	0.000406	10.59211	2.22E-05	0.001669
52	L-15	29	6.39E-05	0.003316	0.000644	2.8E-05	0.000172	7.34E-05	2.95623	2.97E-06	0.000466
53	L-16	47	0.001551	0.048428	0.019949	0.000325	0.00293	0.001315	34.33304	7.2E-05	0.005409
54	L-16	47	0.003096	0.017389	0.021083	6.47E-05	0.002787	0.002443	6.830019	0.000144	0.001076
55	L-16	47	0.000103	0.005374	0.001043	4.54E-05	0.000279	0.000119	4.791131	4.81E-06	0.000755
56	L-16	47	0.000775	0.024214	0.009974	0.000163	0.001465	0.000658	17.16652	3.6E-05	0.002705
57	L-17	35	0.000523	0.000813	0.010081	2.41E-05	0.000136	4.84E-05	2.436758	5.01E-05	6.58E-05
58	L-17	35	0.001153	0.006474	0.00785	2.41E-05	0.001038	0.00091	2.543092	5.35E-05	0.000401
59	L-17	35	7.71E-05	0.004002	0.000777	3.38E-05	0.000208	8.85E-05	3.567863	3.58E-06	0.000562
60	L-18	60	0.000146	0.007221	0.001008	7.06E-05	0.000444	0.000188	7.451785	6.76E-06	0.001174
61	L-18	60	0.001793	0.002786	0.034563	8.26E-05	0.000466	0.000166	8.3546	0.000172	0.000226
62	L-18	60	0.003952	0.022198	0.026914	8.26E-05	0.003558	0.003118	8.719173	0.000184	0.001374
63	L-18	60	0.000132	0.00686	0.001332	5.79E-05	0.000356	0.000152	6.116337	6.14E-06	0.000964
64	P-19	25	0.000412	0.01288	0.005305	8.65E-05	0.000779	0.00035	9.131129	1.92E-05	0.001439
65	P-19	25	0.000823	0.004625	0.005607	1.72E-05	0.000741	0.00065	1.816494	3.82E-05	0.000286
66	P-19	25	2.75E-05	0.001429	0.000277	1.21E-05	7.43E-05	3.16E-05	1.274237	1.28E-06	0.000201
67	P-19	25	0.000206	0.00644	0.002653	4.32E-05	0.00039	0.000175	4.565564	9.58E-06	0.000719

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
68	P-20	13	0.000194	0.000302	0.003744	8.95E-06	5.05E-05	1.8E-05	0.905082	1.86E-05	2.44E-05
69	P-20	13	0.000428	0.002405	0.002916	8.95E-06	0.000385	0.000338	0.944577	1.99E-05	0.000149
70	P-21	13	3.15E-05	0.001565	0.000218	1.53E-05	9.61E-05	4.07E-05	1.614553	1.46E-06	0.000254
71	P-21	13	0.000194	0.000302	0.003744	8.95E-06	5.05E-05	1.8E-05	0.905082	1.86E-05	2.44E-05
72	P-21	13	0.000428	0.002405	0.002916	8.95E-06	0.000385	0.000338	0.944577	1.99E-05	0.000149
73	P-22	13	0.000214	0.006697	0.002759	4.5E-05	0.000405	0.000182	4.748187	9.96E-06	0.000748
74	P-22	13	0.000428	0.002405	0.002916	8.95E-06	0.000385	0.000338	0.944577	1.99E-05	0.000149
75	P-22	13	1.43E-05	0.000743	0.000144	6.27E-06	3.86E-05	1.64E-05	0.662603	6.65E-07	0.000104
76	P-22	13	0.000107	0.003349	0.001379	2.25E-05	0.000203	9.09E-05	2.374093	4.98E-06	0.000374
77	P-23	7	0.000105	0.000163	0.002016	4.82E-06	2.72E-05	9.68E-06	0.487352	1E-05	1.32E-05
78	P-23	7	0.000231	0.001295	0.00157	4.82E-06	0.000208	0.000182	0.508618	1.07E-05	8.01E-05
79	P-24	6	8.96E-05	0.000139	0.001728	4.13E-06	2.33E-05	8.3E-06	0.41773	8.59E-06	1.13E-05
80	P-24	6	0.000198	0.00111	0.001346	4.13E-06	0.000178	0.000156	0.435959	9.18E-06	6.87E-05
81	P-25	12	0.000198	0.006182	0.002547	4.15E-05	0.000374	0.000168	4.382942	9.2E-06	0.000691
82	P-25	12	0.000395	0.00222	0.002691	8.26E-06	0.000356	0.000312	0.871917	1.84E-05	0.000137
83	P-25	12	1.32E-05	0.000686	0.000133	5.79E-06	3.56E-05	1.52E-05	0.611634	6.14E-07	9.64E-05
84	P-25	12	9.9E-05	0.003091	0.001273	2.08E-05	0.000187	8.39E-05	2.191471	4.6E-06	0.000345
85	P-26	24	0.000359	0.000557	0.006913	1.65E-05	9.33E-05	3.32E-05	1.67092	3.43E-05	4.51E-05
86	P-26	24	0.00079	0.00444	0.005383	1.65E-05	0.000712	0.000624	1.743835	3.67E-05	0.000275
87	P-27	23	0.000344	0.000534	0.006625	1.58E-05	8.94E-05	3.18E-05	1.601298	3.29E-05	4.32E-05
88	P-27	23	0.000757	0.004255	0.005158	1.58E-05	0.000682	0.000598	1.671175	3.52E-05	0.000263
89	P-28	26	0.000388	0.000604	0.007489	1.79E-05	0.000101	3.6E-05	1.810163	3.72E-05	4.89E-05
90	P-28	26	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
91	P-28	26	0.000429	0.013395	0.005518	8.99E-05	0.000811	0.000364	9.496374	1.99E-05	0.001496
92	P-28	26	0.000858	0.02679	0.011035	0.00018	0.001621	0.000728	18.99275	3.98E-05	0.002992
93	L-29	51	0.001262	0.039412	0.016235	0.000265	0.002385	0.00107	27.94125	5.86E-05	0.004402
94	L-29	51	0.002519	0.014151	0.017158	5.27E-05	0.002268	0.001988	5.558473	0.000117	0.000876
95	L-29	51	0.000841	0.026275	0.010823	0.000176	0.00159	0.000714	18.6275	3.91E-05	0.002935
96	L-29	51	0.000112	0.005831	0.001132	4.92E-05	0.000303	0.000129	5.198887	5.22E-06	0.000819
97	L-29	51	0.000762	0.001184	0.014689	3.51E-05	0.000198	7.05E-05	3.550705	7.3E-05	9.58E-05
98	P-30	200	0.005975	0.009286	0.115211	0.000275	0.001555	0.000553	27.84867	0.000572	0.000752
99	P-30	200	0.013172	0.073994	0.089713	0.000275	0.01186	0.010394	29.06391	0.000612	0.004579
100	P-30	200	0.0033	0.103038	0.042444	0.000692	0.006235	0.002798	73.04903	0.000153	0.011509
101	P-30	200	0.00097	0.048143	0.006718	0.00047	0.002958	0.001253	49.67857	4.51E-05	0.007827

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
102	P-31	148	0.004422	0.006871	0.085256	0.000204	0.00115	0.000409	20.60801	0.000424	0.000556
103	P-31	148	0.009748	0.054755	0.066388	0.000204	0.008777	0.007692	21.50729	0.000453	0.003388
104	P-31	148	0.000718	0.035626	0.004971	0.000348	0.002189	0.000927	36.76214	3.33E-05	0.005792
105	P-32	200	0.005975	0.009286	0.115211	0.000275	0.001555	0.000553	27.84867	0.000572	0.000752
106	P-32	200	0.013172	0.073994	0.089713	0.000275	0.01186	0.010394	29.06391	0.000612	0.004579
107	P-32	200	0.0033	0.103038	0.042444	0.000692	0.006235	0.002798	73.04903	0.000153	0.011509
108	P-32	200	0.00097	0.048143	0.006718	0.00047	0.002958	0.001253	49.67857	4.51E-05	0.007827
109	P-33	150	0.004481	0.006964	0.086408	0.000206	0.001166	0.000415	20.8865	0.000429	0.000564
110	P-33	150	0.009879	0.055495	0.067285	0.000207	0.008895	0.007796	21.79793	0.000459	0.003434
111	P-33	150	0.000728	0.036107	0.005038	0.000353	0.002219	0.00094	37.25893	3.38E-05	0.00587
112	P-36	77	0.0023	0.003575	0.044356	0.000106	0.000598	0.000213	10.72174	0.00022	0.000289
113	P-36	77	0.005071	0.028488	0.034539	0.000106	0.004566	0.004002	11.18961	0.000236	0.001763
114	P-36	77	0.000373	0.018535	0.002586	0.000181	0.001139	0.000482	19.12625	1.73E-05	0.003013
115	L-37	198	0.005916	0.009193	0.114059	0.000273	0.001539	0.000548	27.57018	0.000567	0.000744
116	L-37	198	0.013041	0.073254	0.088816	0.000273	0.011742	0.010291	28.77327	0.000606	0.004533
117	L-37	198	0.000218	0.01132	0.002197	9.56E-05	0.000588	0.00025	10.09196	1.01E-05	0.00159
118	L-38	140	0.004183	0.0065	0.080647	0.000193	0.001088	0.000387	19.49407	0.000401	0.000526
119	L-38	140	0.00231	0.072127	0.029711	0.000484	0.004365	0.001959	51.13432	0.000107	0.008056
120	L-38	140	0.000308	0.016008	0.003107	0.000135	0.000832	0.000354	14.27145	1.43E-05	0.002248
121	L-39	52	0.001554	0.002414	0.029955	7.16E-05	0.000404	0.000144	7.240654	0.000149	0.000195
122	L-39	52	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
123	L-39	52	0	0	0	0	0	0	0	0	0
124	L-01	51	0.000762	0.001184	0.014689	3.51E-05	0.000198	7.05E-05	3.550705	7.3E-05	9.58E-05
125	L-02	76	0.006812	0.010586	0.13134	0.000314	0.001772	0.000631	31.74748	0.000653	0.000857
126	L-03	127	0.030355	0.047172	0.58527	0.001399	0.007897	0.00281	141.4712	0.002908	0.003819
127	L-04	224	0.033462	0.052	0.645179	0.001542	0.008705	0.003097	155.9525	0.003205	0.00421
128	P-05	37	0.00304	0.004724	0.058613	0.00014	0.000791	0.000281	14.16801	0.000291	0.000382
129	P-06	26	0.002136	0.00332	0.041188	9.84E-05	0.000556	0.000198	9.955899	0.000205	0.000269
130	P-07	20	0.003286	0.005107	0.063366	0.000151	0.000855	0.000304	15.31677	0.000315	0.000413
131	P-08	28	0.0023	0.003575	0.044356	0.000106	0.000598	0.000213	10.72174	0.00022	0.000289
132	P-09	23	0.00189	0.002937	0.036435	8.71E-05	0.000492	0.000175	8.807141	0.000181	0.000238
133	P-10	38	0.006244	0.009704	0.120395	0.000288	0.001624	0.000578	29.10186	0.000598	0.000786
134	P-12	51	0.00419	0.006512	0.080791	0.000193	0.00109	0.000388	19.52888	0.000401	0.000527
135	P-13	26	0.002136	0.00332	0.041188	9.84E-05	0.000556	0.000198	9.955899	0.000205	0.000269

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
136	P-14	111	0.01824	0.028345	0.35168	0.00084	0.004745	0.001688	85.00806	0.001747	0.002295
137	L-15	29	0.001733	0.002693	0.033411	7.98E-05	0.000451	0.00016	8.076114	0.000166	0.000218
138	L-16	47	0.003862	0.006001	0.074455	0.000178	0.001005	0.000357	17.9972	0.00037	0.000486
139	L-17	35	0.002876	0.004469	0.055445	0.000132	0.000748	0.000266	13.40217	0.000275	0.000362
140	L-18	60	0.009859	0.015322	0.190098	0.000454	0.002565	0.000913	45.9503	0.000944	0.00124
141	P-19	25	0.002427	0.003772	0.046804	0.000112	0.000632	0.000225	11.31352	0.000233	0.000305
142	P-20	13	0.001068	0.00166	0.020594	4.92E-05	0.000278	9.89E-05	4.977949	0.000102	0.000134
143	P-21	13	0.000583	0.000905	0.011233	2.68E-05	0.000152	5.39E-05	2.715245	5.58E-05	7.33E-05
144	P-22	13	0.000583	0.000905	0.011233	2.68E-05	0.000152	5.39E-05	2.715245	5.58E-05	7.33E-05
145	P-23	7	0.000314	0.000488	0.006049	1.45E-05	8.16E-05	2.9E-05	1.462055	3E-05	3.95E-05
146	P-24	6	0.000269	0.000418	0.005184	1.24E-05	7E-05	2.49E-05	1.25319	2.58E-05	3.38E-05
147	P-25	12	0.000538	0.000836	0.010369	2.48E-05	0.00014	4.98E-05	2.50638	5.15E-05	6.77E-05
148	P-26	24	0.001076	0.001671	0.020738	4.96E-05	0.00028	9.96E-05	5.01276	0.000103	0.000135
149	P-27	23	0.001031	0.001602	0.019874	4.75E-05	0.000268	9.54E-05	4.803895	9.87E-05	0.00013
150	P-28	26	0.001165	0.001811	0.022466	5.37E-05	0.000303	0.000108	5.43049	0.000112	0.000147
151	L-29	51	0.002666	0.004144	0.051413	0.000123	0.000694	0.000247	12.42747	0.000255	0.000335
152	P-30	200	0.007469	0.011607	0.144013	0.000344	0.001943	0.000691	34.81084	0.000715	0.00094
153	P-31	148	0	0	0	0	0	0	0	0	0
154	P-32	200	0.007469	0.011607	0.144013	0.000344	0.001943	0.000691	34.81084	0.000715	0.00094
155	P-33	150	0	0	0	0	0	0	0	0	0
156	P-36	77	0	0	0	0	0	0	0	0	0
157	L-37	198	0.023662	0.036772	0.456234	0.00109	0.006156	0.00219	110.2807	0.002267	0.002977
158	L-38	140	0.008365	0.013	0.161295	0.000385	0.002176	0.000774	38.98814	0.000801	0.001052
159	L-39	52	0.003884	0.006036	0.074887	0.000179	0.00101	0.00036	18.10163	0.000372	0.000489

Table 23: On-Road Controlled Exhaust Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-01	51	0.000762	0.001184	0.014689	3.51E-05	0.000198	7.05E-05	3.550705	7.3E-05	9.58E-05
2	L-02	76	0.000167	0.00869	0.001687	7.34E-05	0.000451	0.000192	7.747361	7.77E-06	0.001221
3	L-02	76	0.001254	0.039154	0.016129	0.000263	0.002369	0.001063	27.75863	5.82E-05	0.004373
4	L-02	76	0.002271	0.003529	0.04378	0.000105	0.000591	0.00021	10.58249	0.000218	0.000286
5	L-02	76	0.005006	0.028118	0.034091	0.000105	0.004507	0.00395	11.04429	0.000232	0.00174
6	L-02	76	0.000627	0.019577	0.008064	0.000131	0.001185	0.000532	13.87932	2.91E-05	0.002187
7	L-03	127	0.00028	0.014521	0.002818	0.000123	0.000754	0.000321	12.94625	1.3E-05	0.00204
8	L-03	127	0.003794	0.005896	0.073159	0.000175	0.000987	0.000351	17.6839	0.000363	0.000477
9	L-03	127	0.008364	0.046986	0.056968	0.000175	0.007531	0.006601	18.45558	0.000389	0.002908
10	L-03	127	0.004191	0.130858	0.053904	0.000878	0.007919	0.003554	92.77227	0.000195	0.014616
11	L-03	127	0.003143	0.098144	0.040428	0.000659	0.005939	0.002665	69.5792	0.000146	0.010962
12	L-04	224	0.006692	0.0104	0.129036	0.000308	0.001741	0.000619	31.19051	0.000641	0.000842
13	L-04	224	0.014753	0.082873	0.100478	0.000308	0.013283	0.011642	32.55158	0.000685	0.005129
14	L-04	224	0.001087	0.05392	0.007524	0.000527	0.003313	0.001404	55.64	5.05E-05	0.008766
15	P-05	37	0.001221	0.038124	0.015704	0.000256	0.002307	0.001035	27.02814	5.67E-05	0.004258
16	P-05	37	0.002437	0.013689	0.016597	5.09E-05	0.002194	0.001923	5.376824	0.000113	0.000847
17	P-05	37	8.15E-05	0.004231	0.000821	3.57E-05	0.00022	9.36E-05	3.771741	3.78E-06	0.000594
18	P-05	37	0.00061	0.019062	0.007852	0.000128	0.001153	0.000518	13.51407	2.84E-05	0.002129
19	P-06	26	0.000388	0.000604	0.007489	1.79E-05	0.000101	3.6E-05	1.810163	3.72E-05	4.89E-05
20	P-06	26	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
21	P-06	26	5.73E-05	0.002973	0.000577	2.51E-05	0.000154	6.58E-05	2.650413	2.66E-06	0.000418
22	P-07	20	4.85E-05	0.002407	0.000336	2.35E-05	0.000148	6.27E-05	2.483928	2.25E-06	0.000391
23	P-07	20	0.000598	0.000929	0.011521	2.75E-05	0.000155	5.53E-05	2.784867	5.72E-05	7.52E-05
24	P-07	20	0.001317	0.007399	0.008971	2.75E-05	0.001186	0.001039	2.906391	6.12E-05	0.000458
25	P-07	20	4.4E-05	0.002287	0.000444	1.93E-05	0.000119	5.06E-05	2.038779	2.05E-06	0.000321
26	P-08	28	0.000924	0.028851	0.011884	0.000194	0.001746	0.000784	20.45373	4.29E-05	0.003222
27	P-08	28	0.001844	0.010359	0.01256	3.86E-05	0.00166	0.001455	4.068948	8.57E-05	0.000641
28	P-08	28	6.17E-05	0.003202	0.000621	2.7E-05	0.000166	7.08E-05	2.854291	2.86E-06	0.00045
29	P-08	28	0.000462	0.014425	0.005942	9.68E-05	0.000873	0.000392	10.22686	2.15E-05	0.001611
30	P-09	23	0.000344	0.000534	0.006625	1.58E-05	8.94E-05	3.18E-05	1.601298	3.29E-05	4.32E-05
31	P-09	23	0.000757	0.004255	0.005158	1.58E-05	0.000682	0.000598	1.671175	3.52E-05	0.000263
32	P-09	23	5.06E-05	0.00263	0.00051	2.22E-05	0.000137	5.82E-05	2.344596	2.35E-06	0.000369
33	P-10	38	9.22E-05	0.004574	0.000638	4.47E-05	0.000281	0.000119	4.719464	4.28E-06	0.000744

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
34	P-10	38	0.001135	0.001764	0.02189	5.23E-05	0.000295	0.000105	5.291247	0.000109	0.000143
35	P-10	38	0.002503	0.014059	0.017045	5.23E-05	0.002253	0.001975	5.522143	0.000116	0.00087
36	P-10	38	8.37E-05	0.004345	0.000843	3.67E-05	0.000226	9.61E-05	3.87368	3.89E-06	0.00061
37	P-11	25	0.000823	0.004625	0.005607	1.72E-05	0.000741	0.00065	1.816494	3.82E-05	0.000286
38	P-12	51	0.001683	0.052549	0.021646	0.000353	0.00318	0.001427	37.255	7.82E-05	0.00587
39	P-12	51	0.003359	0.018868	0.022877	7.02E-05	0.003024	0.002651	7.411297	0.000156	0.001168
40	P-12	51	0.000112	0.005831	0.001132	4.92E-05	0.000303	0.000129	5.198887	5.22E-06	0.000819
41	P-12	51	0.000841	0.026275	0.010823	0.000176	0.00159	0.000714	18.6275	3.91E-05	0.002935
42	P-13	26	0.000388	0.000604	0.007489	1.79E-05	0.000101	3.6E-05	1.810163	3.72E-05	4.89E-05
43	P-13	26	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
44	P-13	26	5.73E-05	0.002973	0.000577	2.51E-05	0.000154	6.58E-05	2.650413	2.66E-06	0.000418
45	P-14	111	0.000269	0.01336	0.001864	0.000131	0.000821	0.000348	13.7858	1.25E-05	0.002172
46	P-14	111	0.003316	0.005154	0.063942	0.000153	0.000863	0.000307	15.45601	0.000318	0.000417
47	P-14	111	0.007311	0.041066	0.049791	0.000153	0.006582	0.005769	16.13047	0.00034	0.002541
48	P-14	111	0.000244	0.012692	0.002463	0.000107	0.000659	0.000281	11.31522	1.14E-05	0.001783
49	L-15	29	0.000433	0.000673	0.008353	2E-05	0.000113	4.01E-05	2.019028	4.15E-05	5.45E-05
50	L-15	29	0.000955	0.005365	0.006504	2E-05	0.00086	0.000754	2.107134	4.44E-05	0.000332
51	L-15	29	0.000478	0.014941	0.006154	0.0001	0.000904	0.000406	10.59211	2.22E-05	0.001669
52	L-15	29	6.39E-05	0.003316	0.000644	2.8E-05	0.000172	7.34E-05	2.95623	2.97E-06	0.000466
53	L-16	47	0.001551	0.048428	0.019949	0.000325	0.00293	0.001315	34.33304	7.2E-05	0.005409
54	L-16	47	0.003096	0.017389	0.021083	6.47E-05	0.002787	0.002443	6.830019	0.000144	0.001076
55	L-16	47	0.000103	0.005374	0.001043	4.54E-05	0.000279	0.000119	4.791131	4.81E-06	0.000755
56	L-16	47	0.000775	0.024214	0.009974	0.000163	0.001465	0.000658	17.16652	3.6E-05	0.002705
57	L-17	35	0.000523	0.000813	0.010081	2.41E-05	0.000136	4.84E-05	2.436758	5.01E-05	6.58E-05
58	L-17	35	0.001153	0.006474	0.00785	2.41E-05	0.001038	0.00091	2.543092	5.35E-05	0.000401
59	L-17	35	7.71E-05	0.004002	0.000777	3.38E-05	0.000208	8.85E-05	3.567863	3.58E-06	0.000562
60	L-18	60	0.000146	0.007221	0.001008	7.06E-05	0.000444	0.000188	7.451785	6.76E-06	0.001174
61	L-18	60	0.001793	0.002786	0.034563	8.26E-05	0.000466	0.000166	8.3546	0.000172	0.000226
62	L-18	60	0.003952	0.022198	0.026914	8.26E-05	0.003558	0.003118	8.719173	0.000184	0.001374
63	L-18	60	0.000132	0.00686	0.001332	5.79E-05	0.000356	0.000152	6.116337	6.14E-06	0.000964
64	P-19	25	0.000412	0.01288	0.005305	8.65E-05	0.000779	0.00035	9.131129	1.92E-05	0.001439
65	P-19	25	0.000823	0.004625	0.005607	1.72E-05	0.000741	0.00065	1.816494	3.82E-05	0.000286
66	P-19	25	2.75E-05	0.001429	0.000277	1.21E-05	7.43E-05	3.16E-05	1.274237	1.28E-06	0.000201
67	P-19	25	0.000206	0.00644	0.002653	4.32E-05	0.00039	0.000175	4.565564	9.58E-06	0.000719

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
68	P-20	13	0.000194	0.000302	0.003744	8.95E-06	5.05E-05	1.8E-05	0.905082	1.86E-05	2.44E-05
69	P-20	13	0.000428	0.002405	0.002916	8.95E-06	0.000385	0.000338	0.944577	1.99E-05	0.000149
70	P-21	13	3.15E-05	0.001565	0.000218	1.53E-05	9.61E-05	4.07E-05	1.614553	1.46E-06	0.000254
71	P-21	13	0.000194	0.000302	0.003744	8.95E-06	5.05E-05	1.8E-05	0.905082	1.86E-05	2.44E-05
72	P-21	13	0.000428	0.002405	0.002916	8.95E-06	0.000385	0.000338	0.944577	1.99E-05	0.000149
73	P-22	13	0.000214	0.006697	0.002759	4.5E-05	0.000405	0.000182	4.748187	9.96E-06	0.000748
74	P-22	13	0.000428	0.002405	0.002916	8.95E-06	0.000385	0.000338	0.944577	1.99E-05	0.000149
75	P-22	13	1.43E-05	0.000743	0.000144	6.27E-06	3.86E-05	1.64E-05	0.662603	6.65E-07	0.000104
76	P-22	13	0.000107	0.003349	0.001379	2.25E-05	0.000203	9.09E-05	2.374093	4.98E-06	0.000374
77	P-23	7	0.000105	0.000163	0.002016	4.82E-06	2.72E-05	9.68E-06	0.487352	1E-05	1.32E-05
78	P-23	7	0.000231	0.001295	0.00157	4.82E-06	0.000208	0.000182	0.508618	1.07E-05	8.01E-05
79	P-24	6	8.96E-05	0.000139	0.001728	4.13E-06	2.33E-05	8.3E-06	0.41773	8.59E-06	1.13E-05
80	P-24	6	0.000198	0.00111	0.001346	4.13E-06	0.000178	0.000156	0.435959	9.18E-06	6.87E-05
81	P-25	12	0.000198	0.006182	0.002547	4.15E-05	0.000374	0.000168	4.382942	9.2E-06	0.000691
82	P-25	12	0.000395	0.00222	0.002691	8.26E-06	0.000356	0.000312	0.871917	1.84E-05	0.000137
83	P-25	12	1.32E-05	0.000686	0.000133	5.79E-06	3.56E-05	1.52E-05	0.611634	6.14E-07	9.64E-05
84	P-25	12	9.9E-05	0.003091	0.001273	2.08E-05	0.000187	8.39E-05	2.191471	4.6E-06	0.000345
85	P-26	24	0.000359	0.000557	0.006913	1.65E-05	9.33E-05	3.32E-05	1.67092	3.43E-05	4.51E-05
86	P-26	24	0.00079	0.00444	0.005383	1.65E-05	0.000712	0.000624	1.743835	3.67E-05	0.000275
87	P-27	23	0.000344	0.000534	0.006625	1.58E-05	8.94E-05	3.18E-05	1.601298	3.29E-05	4.32E-05
88	P-27	23	0.000757	0.004255	0.005158	1.58E-05	0.000682	0.000598	1.671175	3.52E-05	0.000263
89	P-28	26	0.000388	0.000604	0.007489	1.79E-05	0.000101	3.6E-05	1.810163	3.72E-05	4.89E-05
90	P-28	26	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
91	P-28	26	0.000429	0.013395	0.005518	8.99E-05	0.000811	0.000364	9.496374	1.99E-05	0.001496
92	P-28	26	0.000858	0.02679	0.011035	0.00018	0.001621	0.000728	18.99275	3.98E-05	0.002992
93	L-29	51	0.001262	0.039412	0.016235	0.000265	0.002385	0.00107	27.94125	5.86E-05	0.004402
94	L-29	51	0.002519	0.014151	0.017158	5.27E-05	0.002268	0.001988	5.558473	0.000117	0.000876
95	L-29	51	0.000841	0.026275	0.010823	0.000176	0.00159	0.000714	18.6275	3.91E-05	0.002935
96	L-29	51	0.000112	0.005831	0.001132	4.92E-05	0.000303	0.000129	5.198887	5.22E-06	0.000819
97	L-29	51	0.000762	0.001184	0.014689	3.51E-05	0.000198	7.05E-05	3.550705	7.3E-05	9.58E-05
98	P-30	200	0.005975	0.009286	0.115211	0.000275	0.001555	0.000553	27.84867	0.000572	0.000752
99	P-30	200	0.013172	0.073994	0.089713	0.000275	0.01186	0.010394	29.06391	0.000612	0.004579
100	P-30	200	0.0033	0.103038	0.042444	0.000692	0.006235	0.002798	73.04903	0.000153	0.011509
101	P-30	200	0.00097	0.048143	0.006718	0.00047	0.002958	0.001253	49.67857	4.51E-05	0.007827

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
102	P-31	148	0.004422	0.006871	0.085256	0.000204	0.00115	0.000409	20.60801	0.000424	0.000556
103	P-31	148	0.009748	0.054755	0.066388	0.000204	0.008777	0.007692	21.50729	0.000453	0.003388
104	P-31	148	0.000718	0.035626	0.004971	0.000348	0.002189	0.000927	36.76214	3.33E-05	0.005792
105	P-32	200	0.005975	0.009286	0.115211	0.000275	0.001555	0.000553	27.84867	0.000572	0.000752
106	P-32	200	0.013172	0.073994	0.089713	0.000275	0.01186	0.010394	29.06391	0.000612	0.004579
107	P-32	200	0.0033	0.103038	0.042444	0.000692	0.006235	0.002798	73.04903	0.000153	0.011509
108	P-32	200	0.00097	0.048143	0.006718	0.00047	0.002958	0.001253	49.67857	4.51E-05	0.007827
109	P-33	150	0.004481	0.006964	0.086408	0.000206	0.001166	0.000415	20.8865	0.000429	0.000564
110	P-33	150	0.009879	0.055495	0.067285	0.000207	0.008895	0.007796	21.79793	0.000459	0.003434
111	P-33	150	0.000728	0.036107	0.005038	0.000353	0.002219	0.00094	37.25893	3.38E-05	0.00587
112	P-36	77	0.0023	0.003575	0.044356	0.000106	0.000598	0.000213	10.72174	0.00022	0.000289
113	P-36	77	0.005071	0.028488	0.034539	0.000106	0.004566	0.004002	11.18961	0.000236	0.001763
114	P-36	77	0.000373	0.018535	0.002586	0.000181	0.001139	0.000482	19.12625	1.73E-05	0.003013
115	L-37	198	0.005916	0.009193	0.114059	0.000273	0.001539	0.000548	27.57018	0.000567	0.000744
116	L-37	198	0.013041	0.073254	0.088816	0.000273	0.011742	0.010291	28.77327	0.000606	0.004533
117	L-37	198	0.000218	0.01132	0.002197	9.56E-05	0.000588	0.00025	10.09196	1.01E-05	0.00159
118	L-38	140	0.004183	0.0065	0.080647	0.000193	0.001088	0.000387	19.49407	0.000401	0.000526
119	L-38	140	0.00231	0.072127	0.029711	0.000484	0.004365	0.001959	51.13432	0.000107	0.008056
120	L-38	140	0.000308	0.016008	0.003107	0.000135	0.000832	0.000354	14.27145	1.43E-05	0.002248
121	L-39	52	0.001554	0.002414	0.029955	7.16E-05	0.000404	0.000144	7.240654	0.000149	0.000195
122	L-39	52	0.000856	0.00481	0.005831	1.79E-05	0.000771	0.000676	1.889154	3.98E-05	0.000298
123	L-39	52	0	0	0	0	0	0	0	0	0
124	L-01	51	0.000762	0.001184	0.014689	3.51E-05	0.000198	7.05E-05	3.550705	7.3E-05	9.58E-05
125	L-02	76	0.006812	0.010586	0.13134	0.000314	0.001772	0.000631	31.74748	0.000653	0.000857
126	L-03	127	0.030355	0.047172	0.58527	0.001399	0.007897	0.00281	141.4712	0.002908	0.003819
127	L-04	224	0.033462	0.052	0.645179	0.001542	0.008705	0.003097	155.9525	0.003205	0.00421
128	P-05	37	0.00304	0.004724	0.058613	0.00014	0.000791	0.000281	14.16801	0.000291	0.000382
129	P-06	26	0.002136	0.00332	0.041188	9.84E-05	0.000556	0.000198	9.955899	0.000205	0.000269
130	P-07	20	0.003286	0.005107	0.063366	0.000151	0.000855	0.000304	15.31677	0.000315	0.000413
131	P-08	28	0.0023	0.003575	0.044356	0.000106	0.000598	0.000213	10.72174	0.00022	0.000289
132	P-09	23	0.00189	0.002937	0.036435	8.71E-05	0.000492	0.000175	8.807141	0.000181	0.000238
133	P-10	38	0.006244	0.009704	0.120395	0.000288	0.001624	0.000578	29.10186	0.000598	0.000786
134	P-12	51	0.00419	0.006512	0.080791	0.000193	0.00109	0.000388	19.52888	0.000401	0.000527
135	P-13	26	0.002136	0.00332	0.041188	9.84E-05	0.000556	0.000198	9.955899	0.000205	0.000269

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
136	P-14	111	0.01824	0.028345	0.35168	0.00084	0.004745	0.001688	85.00806	0.001747	0.002295
137	L-15	29	0.001733	0.002693	0.033411	7.98E-05	0.000451	0.00016	8.076114	0.000166	0.000218
138	L-16	47	0.003862	0.006001	0.074455	0.000178	0.001005	0.000357	17.9972	0.00037	0.000486
139	L-17	35	0.002876	0.004469	0.055445	0.000132	0.000748	0.000266	13.40217	0.000275	0.000362
140	L-18	60	0.009859	0.015322	0.190098	0.000454	0.002565	0.000913	45.9503	0.000944	0.00124
141	P-19	25	0.002427	0.003772	0.046804	0.000112	0.000632	0.000225	11.31352	0.000233	0.000305
142	P-20	13	0.001068	0.00166	0.020594	4.92E-05	0.000278	9.89E-05	4.977949	0.000102	0.000134
143	P-21	13	0.000583	0.000905	0.011233	2.68E-05	0.000152	5.39E-05	2.715245	5.58E-05	7.33E-05
144	P-22	13	0.000583	0.000905	0.011233	2.68E-05	0.000152	5.39E-05	2.715245	5.58E-05	7.33E-05
145	P-23	7	0.000314	0.000488	0.006049	1.45E-05	8.16E-05	2.9E-05	1.462055	3E-05	3.95E-05
146	P-24	6	0.000269	0.000418	0.005184	1.24E-05	7E-05	2.49E-05	1.25319	2.58E-05	3.38E-05
147	P-25	12	0.000538	0.000836	0.010369	2.48E-05	0.00014	4.98E-05	2.50638	5.15E-05	6.77E-05
148	P-26	24	0.001076	0.001671	0.020738	4.96E-05	0.00028	9.96E-05	5.01276	0.000103	0.000135
149	P-27	23	0.001031	0.001602	0.019874	4.75E-05	0.000268	9.54E-05	4.803895	9.87E-05	0.00013
150	P-28	26	0.001165	0.001811	0.022466	5.37E-05	0.000303	0.000108	5.43049	0.000112	0.000147
151	L-29	51	0.002666	0.004144	0.051413	0.000123	0.000694	0.000247	12.42747	0.000255	0.000335
152	P-30	200	0.007469	0.011607	0.144013	0.000344	0.001943	0.000691	34.81084	0.000715	0.00094
153	P-31	148	0	0	0	0	0	0	0	0	0
154	P-32	200	0.007469	0.011607	0.144013	0.000344	0.001943	0.000691	34.81084	0.000715	0.00094
155	P-33	150	0	0	0	0	0	0	0	0	0
156	P-36	77	0	0	0	0	0	0	0	0	0
157	L-37	198	0.023662	0.036772	0.456234	0.00109	0.006156	0.00219	110.2807	0.002267	0.002977
158	L-38	140	0.008365	0.013	0.161295	0.000385	0.002176	0.000774	38.98814	0.000801	0.001052
159	L-39	52	0.003884	0.006036	0.074887	0.000179	0.00101	0.00036	18.10163	0.000372	0.000489

Table 24: On-Road Uncontrolled Dust Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	HP	Quantity	Year	Trips/Day	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-01	Survey	Pickup - 1/2 Ton	Gas	395	2	2026	4	50	200	92	184	16	passenger	0	0	0	0	23.54106	2.367384	0	0	0
2	L-02	Site Development	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
3	L-02	Site Development	Truck - Dump 10-12 Yd	Diesel	415	2	2026	4	50	200	97.5	195	5	hhdt	0	0	0	0	7.447543	0.762548	0	0	0
4	L-02	Site Development	Pickup - 1/2 Ton	Gas	395	4	2026	8	50	400	97.5	390	10	passenger	0	0	0	0	14.89509	1.525096	0	0	0
5	L-02	Site Development	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	97.5	390	10	passenger	0	0	0	0	14.89509	1.525096	0	0	0
6	L-02	Site Development	Semi Truck	Diesel	500	1	2026	2	50	100	97.5	97.5	2.5	hhdt	0	0	0	0	3.723772	0.381274	0	0	0
7	L-03	Below-Grade Construction	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
8	L-03	Below-Grade Construction	Pickup - 1/2 Ton	Gas	395	4	2026	8	50	400	97.5	390	10	passenger	0	0	0	0	14.89509	1.525096	0	0	0
9	L-03	Below-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	97.5	390	10	passenger	0	0	0	0	14.89509	1.525096	0	0	0
10	L-03	Below-Grade Construction	Truck - Concrete	Diesel	425	4	2026	8	50	400	97.5	390	10	hhdt	0	0	0	0	14.89509	1.525096	0	0	0
11	L-03	Below-Grade Construction	Truck - Dump 10-12 Yd	Diesel	415	3	2026	6	50	300	97.5	292.5	7.5	hhdt	0	0	0	0	11.17131	1.143822	0	0	0
12	L-04	Above-Grade Construction (Phase 1)	Pickup - 1/2 Ton	Gas	395	4	2026	8	50	400	97.5	390	10	passenger	0	0	0	0	14.89509	1.525096	0	0	0
13	L-04	Above-Grade Construction (Phase 1)	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	97.5	390	10	passenger	0	0	0	0	14.89509	1.525096	0	0	0
14	L-04	Above-Grade Construction (Phase 1)	Welding Truck	Diesel	395	2	2026	4	50	200	97.5	195	5	vendor	0	0	0	0	7.447543	0.762548	0	0	0
15	P-05	Structure Foundation Installation	Truck - Concrete	Diesel	425	4	2026	8	50	400	96	384	16	hhdt	0	0	0	0	23.67337	2.400461	0	0	0
16	P-05	Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
17	P-05	Structure Foundation Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
18	P-05	Structure Foundation Installation	Truck - Dump 10-12 Yd	Diesel	415	2	2026	4	50	200	96	192	8	hhdt	0	0	0	0	11.83668	1.20023	0	0	0
19	P-06	Structure Installation	Pickup - 1/2 ton	Gas	395	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
20	P-06	Structure Installation	Pickup - 1 ton	Diesel	410	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
21	P-06	Structure Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
22	P-07	Conductor Installation	Jet Fuel Truck	Diesel	300	1	2026	2	50	100	97	97	3	vendor	0	0	0	0	4.455295	0.454221	0	0	0
23	P-07	Conductor Installation	Pickup - 1/2 ton	Gas	395	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
24	P-07	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
25	P-07	Conductor Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
26	P-08	Structure Foundation Installation	Truck - Concrete	Diesel	425	4	2026	8	50	400	96	384	16	hhdt	0	0	0	0	23.67337	2.400461	0	0	0
27	P-08	Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
28	P-08	Structure Foundation Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
29	P-08	Structure Foundation Installation	Truck - Dump 10-12 Yd	Diesel	415	2	2026	4	50	200	96	192	8	hhdt	0	0	0	0	11.83668	1.20023	0	0	0
30	P-09	Structure Installation	Pickup - 1/2 ton	Gas	395	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
31	P-09	Structure Installation	Pickup - 1 ton	Diesel	410	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
32	P-09	Structure Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
33	P-10	Conductor Installation	Jet Fuel Truck	Diesel	300	1	2026	2	50	100	97	97	3	vendor	0	0	0	0	4.455295	0.454221	0	0	0
34	P-10	Conductor Installation	Pickup - 1/2 ton	Gas	395	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
35	P-10	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
36	P-10	Conductor Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
37	P-11	Access Construction	Pickup - 1 Ton	Diesel	410	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
38	P-12	Structure Foundation Installation	Truck - Concrete	Diesel	425	4	2026	8	50	400	96	384	16	hhdt	0	0	0	0	23.67337	2.400461	0	0	0
39	P-12	Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
40	P-12	Structure Foundation Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
41	P-12	Structure Foundation Installation	Truck - Dump 10-12 Yd	Diesel	415	2	2026	4	50	200	96	192	8	hhdt	0	0	0	0	11.83668	1.20023	0	0	0
42	P-13	Structure Installation	Pickup - 1/2 ton	Gas	395	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
43	P-13	Structure Installation	Pickup - 1 ton	Diesel	410	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
44	P-13	Structure Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
45	P-14	Conductor Installation	Jet Fuel Truck	Diesel	300	1	2026	2	50	100	97	97	3	vendor	0	0	0	0	4.455295	0.454221	0	0	0
46	P-14	Conductor Installation	Pickup - 1/2 ton	Gas	395	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
47	P-14	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
48	P-14	Conductor Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
49	L-15	Access Road Construction	Pickup - 1/2 Ton	Gas	395	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
50	L-15	Access Road Construction	Pickup - 1 ton	Diesel	410	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
51	L-15	Access Road Construction	Truck - Dump 10-12 Yd	Diesel	415	2	2026	4	50	200	96	192	8	hhdt	0	0	0	0	11.83668	1.20023	0	0	0
52	L-15	Access Road Construction	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
53	L-16	Structure Foundation Installation	Truck - Concrete	Diesel	425	4	2026	8	50	400	96	384	16	hhdt	0	0	0	0	23.67337	2.400461	0	0	0
54	L-16	Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
55	L-16	Structure Foundation Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
56	L-16	Structure Foundation Installation	Truck - Dump 10-12 Yd	Diesel	415	2	2026	4	50	200	96	192	8	hhdt	0	0	0	0	11.83668	1.20023	0	0	0
57	L-17	Structure Installation	Pickup - 1/2 ton	Gas	395	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
58	L-17	Structure Installation	Pickup - 1 ton	Diesel	410	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
59	L-17	Structure Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
60	L-18	Conductor Installation	Jet Fuel Truck	Diesel	300	1	2026	2	50	100	97	97	3	vendor	0	0	0	0	4.455295	0.454221	0	0	0
61	L-18	Conductor Installation	Pickup - 1/2 ton	Gas	395	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
62	L-18	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2026	8	50	400	96	384	16	passenger	0	0	0	0	23.67337	2.400461	0	0	0
63	L-18	Conductor Installation	Truck - Water 4 K	Diesel	300	2	2026	4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0
64	P-19	Structure Foundation Installation	Truck - Concrete	Diesel	425	2	2026	4	50	200	96	192	8	hhdt	0	0	0	0	11.83668	1.20023	0	0	0
65	P-19	Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	2	2026	4	50	200	96	192	8	passenger	0	0	0	0	11.83668	1.20023	0	0	0
66	P-19																						

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	HP	Quantity	Year	Trips/Day	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O	
82	P-25	Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	2	2026	2	4	50	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
83	P-25	Structure Foundation Installation	Truck - Water 4 K	Diesel	300	1	2026	2	20	40	80	32	8	vendor	0	0	0	0	11.73084	1.173769	0	0	0	
84	P-25	Structure Foundation Installation	Truck - Dump 10-12 Yd	Diesel	415	1	2026	2	50	100	98	98	2	hhdtd	0	0	0	0	2.992248	0.308327	0	0	0	
85	P-26	Structure Installation	Pickup - 1/2 ton	Gas	395	2		4	4	50	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
86	P-26	Structure Installation	Pickup - 1 ton	Diesel	410	2		4	4	50	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
87	P-27	Conductor Installation	Pickup - 1/2 ton	Gas	395	2		4	4	50	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
88	P-27	Conductor Installation	Pickup - 1 Ton	Diesel	410	2		4	4	50	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
89	P-28	Distribution Extension to Substation	Pickup - 1/2 ton	Gas	395	2		4	4	50	200	97	194	6	passenger	0	0	0	0	8.91059	0.908442	0	0	0
90	P-28	Distribution Extension to Substation	Pickup - 1 Ton	Diesel	410	2		4	4	50	200	97	194	6	passenger	0	0	0	0	8.91059	0.908442	0	0	0
91	P-28	Distribution Extension to Substation	Truck - Dump 10-12 Yd	Diesel	415	2		4	4	50	200	97	194	6	hhdtd	0	0	0	0	8.91059	0.908442	0	0	0
92	P-28	Distribution Extension to Substation	Truck - Concrete	Diesel	425	4		8	50	400	97	388	12	hhdtd	0	0	0	0	17.82118	1.816884	0	0	0	
93	L-29	Fiber Extension to Substation	Truck - Dump 10-12 Yd	Diesel	415	3		6	50	300	97	291	9	hhdtd	0	0	0	0	13.36589	1.362663	0	0	0	
94	L-29	Fiber Extension to Substation	Pickup - 1 Ton	Diesel	410	3		6	50	300	97	291	9	passenger	0	0	0	0	13.36589	1.362663	0	0	0	
95	L-29	Fiber Extension to Substation	Truck - Concrete	Diesel	425	2		4	50	200	97	194	6	hhdtd	0	0	0	0	8.91059	0.908442	0	0	0	
96	L-29	Fiber Extension to Substation	Truck - Water 4 K	Diesel	300	2		4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0	
97	L-29	Fiber Extension to Substation	Pickup - 1/2 Ton	Gas	395	2		4	50	200	97	194	6	passenger	0	0	0	0	8.91059	0.908442	0	0	0	
98	P-30	Tranquility Outdoor	Pickup - 1/2 Ton	Gas	395	4		8	50	400	97	388	12	passenger	0	0	0	0	17.82118	1.816884	0	0	0	
99	P-30	Tranquility Outdoor	Pickup - 1 Ton	Diesel	410	4		8	50	400	97	388	12	passenger	0	0	0	0	17.82118	1.816884	0	0	0	
100	P-30	Tranquility Outdoor	Truck - Concrete	Diesel	425	2		4	50	200	97	194	6	hhdtd	0	0	0	0	8.91059	0.908442	0	0	0	
101	P-30	Tranquility Outdoor	Welding Truck	Diesel	395	2		4	50	200	97	194	6	vendor	0	0	0	0	8.91059	0.908442	0	0	0	
102	P-31	Tranquility Indoor	Pickup - 1/2 Ton	Gas	395	4		8	50	400	97	388	12	passenger	0	0	0	0	17.82118	1.816884	0	0	0	
103	P-31	Tranquility Indoor	Pickup - 1 Ton	Diesel	410	4		8	50	400	97	388	12	passenger	0	0	0	0	17.82118	1.816884	0	0	0	
104	P-31	Tranquility Indoor	Welding Truck	Diesel	395	2		4	50	200	97	194	6	vendor	0	0	0	0	8.91059	0.908442	0	0	0	
105	P-32	Panoche Outdoor	Pickup - 1/2 Ton	Gas	395	4		8	50	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0	
106	P-32	Panoche Outdoor	Pickup - 1 Ton	Diesel	410	4		8	50	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0	
107	P-32	Panoche Outdoor	Truck - Concrete	Diesel	425	2		4	50	200	99	198	2	hhdtd	0	0	0	0	3.058402	0.324865	0	0	0	
108	P-32	Panoche Outdoor	Welding Truck	Diesel	395	2		4	50	200	99	198	2	vendor	0	0	0	0	3.058402	0.324865	0	0	0	
109	P-33	Panoche Indoor	Pickup - 1/2 Ton	Gas	395	4		8	50	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0	
110	P-33	Panoche Indoor	Pickup - 1 Ton	Diesel	410	4		8	50	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0	
111	P-33	Panoche Indoor	Welding Truck	Diesel	395	2		4	50	200	99	198	2	vendor	0	0	0	0	3.058402	0.324865	0	0	0	
112	P-36	Substation Modifications	Pickup - 1/2 Ton	Gas	395	4		8	50	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0	
113	P-36	Substation Modifications	Pickup - 1 Ton	Diesel	410	4		8	50	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0	
114	P-36	Substation Modifications	Welding Truck	Diesel	395	2		4	50	200	99	198	2	vendor	0	0	0	0	3.058402	0.324865	0	0	0	
115	L-37	Commissioning and Testing	Pickup - 1/2 Ton	Gas	395	4		8	50	400	92	368	32	passenger	0	0	0	0	47.08212	4.734768	0	0	0	
116	L-37	Commissioning and Testing	Pickup - 1 Ton	Diesel	410	4		8	50	400	92	368	32	passenger	0	0	0	0	47.08212	4.734768	0	0	0	
117	L-37	Commissioning and Testing	Truck - Water 4 K	Diesel	300	1		2	20	40	80	32	8	vendor	0	0	0	0	11.73084	1.173769	0	0	0	
118	L-38	Site & ROW Restoration	Pickup - 1/2 ton	Gas	395	4		8	50	400	92	368	32	passenger	0	0	0	0	47.08212	4.734768	0	0	0	
119	L-38	Site & ROW Restoration	Truck - Dump 10-12 Yd	Diesel	415	2		4	50	200	92	184	16	hhdtd	0	0	0	0	23.54106	2.367384	0	0	0	
120	L-38	Site & ROW Restoration	Truck - Water 4 K	Diesel	300	2		4	20	80	80	64	16	vendor	0	0	0	0	23.46168	2.347538	0	0	0	
121	L-39	Above-Grade Construction (Phase 2)	Pickup - 1/2 Ton	Gas	395	4		8	50	400	97.5	390	10	passenger	0	0	0	0	14.89509	1.525096	0	0	0	
122	L-39	Above-Grade Construction (Phase 2)	Pickup - 1 Ton	Diesel	410	1		2	50	100	97.5	97.5	2.5	passenger	0	0	0	0	3.723772	0.381274	0	0	0	
123	L-39	Above-Grade Construction (Phase 2)	Welding Truck	Diesel	395	0		0	50	0	97.5	0	0	vendor	0	0	0	0	0	0	0	0	0	
124	L-01	Survey	Worker Commute	Gas	NA	2		4	50	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0	
125	L-02	Site Development	Worker Commute	Gas	NA	12		24	50	1200	98	1176	24	passenger	0	0	0	0	35.90698	3.699922	0	0	0	
126	L-03	Below-Grade Construction	Worker Commute	Gas	NA	32		64	50	3200	98	3136	64	passenger	0	0	0	0	95.75193	9.866458	0	0	0	
127	L-04	Above-Grade Construction (Phase 1)	Worker Commute	Gas	NA	20		40	50	2000	98	1960	40	passenger	0	0	0	0	59.84496	6.166536	0	0	0	
128	P-05	Structure Foundation Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
129	P-06	Structure Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
130	P-07	Conductor Installation	Worker Commute	Gas	NA	22		44	50	2200	98	2156	44	passenger	0	0	0	0	65.82945	6.78319	0	0	0	
131	P-08	Structure Foundation Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
132	P-09	Structure Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
133	P-10	Conductor Installation	Worker Commute	Gas	NA	22		44	50	2200	98	2156	44	passenger	0	0	0	0	65.82945	6.78319	0	0	0	
134	P-12	Structure Foundation Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
135	P-13	Structure Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
136	P-14	Conductor Installation	Worker Commute	Gas	NA	22		44	50	2200	98	2156	44	passenger	0	0	0	0	65.82945	6.78319	0	0	0	
137	L-15	Access Road Construction	Worker Commute	Gas	NA	8		16	50	800	98	784	16	passenger	0	0	0	0	23.93798	2.466614	0	0	0	
138	L-16	Structure Foundation Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
139	L-17	Structure Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
140	L-18	Conductor Installation	Worker Commute	Gas	NA	22		44	50	2200	98	2156	44	passenger	0	0	0	0	65.82945	6.78319	0	0	0	
141	P-19	Structure Foundation Installation	Worker Commute	Gas	NA	13		26	50	1300	98	1274	26	passenger	0	0	0	0	38.89922	4.008249	0	0	0	
142	P-20	Structure Installation	Worker Commute	Gas	NA	11		22	50	1100	98	1078	22	passenger	0	0	0	0	32.91473	3.391595	0	0	0	
143	P-21	Conductor Installation	Worker Commute	Gas	NA	6		12	50	600	98	588	12	passenger	0	0	0	0	17.95349	1.849961	0	0	0	
144	P-22	Structure Foundation Installation	Worker Commute	Gas	NA	6		12	50	600	98	588	12	passenger	0	0	0	0	17.95349	1.849961	0	0	0	
145	P-23	Structure Installation	Worker Commute	Gas	NA	6		12	50	600	98	588	12	passenger	0	0	0	0	17.95349	1.849961	0	0	0	
146	P-24	Conductor Installation	Worker Commute	Gas	NA	6		12	50	600	98	588	12	passenger	0	0	0	0	17.95349	1.849961	0	0	0	
147	P-25	Structure Foundation Installation	Worker Commute	Gas	NA	6		12	50	600	98	588	12	passenger	0	0	0	0	17.95349	1.849961	0	0	0	
148	P-26	Structure Installation	Worker Commute	Gas	NA	6		12	50	600	98	588	12	passenger	0									

Table 25: On-Road Uncontrolled Dust Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-01	51	0	0	0	0	0.600297	0.060368	0	0	0
2	L-02	76	0	0	0	0	0.891544	0.089206	0	0	0
3	L-02	76	0	0	0	0	0.283007	0.028977	0	0	0
4	L-02	76	0	0	0	0	0.566013	0.057954	0	0	0
5	L-02	76	0	0	0	0	0.566013	0.057954	0	0	0
6	L-02	76	0	0	0	0	0.141503	0.014488	0	0	0
7	L-03	127	0	0	0	0	1.489816	0.149069	0	0	0
8	L-03	127	0	0	0	0	0.945838	0.096844	0	0	0
9	L-03	127	0	0	0	0	0.945838	0.096844	0	0	0
10	L-03	127	0	0	0	0	0.945838	0.096844	0	0	0
11	L-03	127	0	0	0	0	0.709378	0.072633	0	0	0
12	L-04	224	0	0	0	0	1.66825	0.170811	0	0	0
13	L-04	224	0	0	0	0	1.66825	0.170811	0	0	0
14	L-04	224	0	0	0	0	0.834125	0.085405	0	0	0
15	P-05	37	0	0	0	0	0.437957	0.044409	0	0	0
16	P-05	37	0	0	0	0	0.437957	0.044409	0	0	0
17	P-05	37	0	0	0	0	0.434041	0.043429	0	0	0
18	P-05	37	0	0	0	0	0.218979	0.022204	0	0	0
19	P-06	26	0	0	0	0	0.153877	0.015603	0	0	0
20	P-06	26	0	0	0	0	0.153877	0.015603	0	0	0
21	P-06	26	0	0	0	0	0.305002	0.030518	0	0	0
22	P-07	20	0	0	0	0	0.044553	0.004542	0	0	0
23	P-07	20	0	0	0	0	0.236734	0.024005	0	0	0
24	P-07	20	0	0	0	0	0.236734	0.024005	0	0	0
25	P-07	20	0	0	0	0	0.234617	0.023475	0	0	0
26	P-08	28	0	0	0	0	0.331427	0.033606	0	0	0
27	P-08	28	0	0	0	0	0.331427	0.033606	0	0	0
28	P-08	28	0	0	0	0	0.328463	0.032866	0	0	0
29	P-08	28	0	0	0	0	0.165714	0.016803	0	0	0
30	P-09	23	0	0	0	0	0.136122	0.013803	0	0	0
31	P-09	23	0	0	0	0	0.136122	0.013803	0	0	0
32	P-09	23	0	0	0	0	0.269809	0.026997	0	0	0
33	P-10	38	0	0	0	0	0.084651	0.00863	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
34	P-10	38	0	0	0	0	0.449794	0.045609	0	0	0
35	P-10	38	0	0	0	0	0.449794	0.045609	0	0	0
36	P-10	38	0	0	0	0	0.445772	0.044603	0	0	0
37	P-11	25	0	0	0	0	0.147959	0.015003	0	0	0
38	P-12	51	0	0	0	0	0.603671	0.061212	0	0	0
39	P-12	51	0	0	0	0	0.603671	0.061212	0	0	0
40	P-12	51	0	0	0	0	0.598273	0.059862	0	0	0
41	P-12	51	0	0	0	0	0.301835	0.030606	0	0	0
42	P-13	26	0	0	0	0	0.153877	0.015603	0	0	0
43	P-13	26	0	0	0	0	0.153877	0.015603	0	0	0
44	P-13	26	0	0	0	0	0.305002	0.030518	0	0	0
45	P-14	111	0	0	0	0	0.247269	0.025209	0	0	0
46	P-14	111	0	0	0	0	1.313872	0.133226	0	0	0
47	P-14	111	0	0	0	0	1.313872	0.133226	0	0	0
48	P-14	111	0	0	0	0	1.302123	0.130288	0	0	0
49	L-15	29	0	0	0	0	0.171632	0.017403	0	0	0
50	L-15	29	0	0	0	0	0.171632	0.017403	0	0	0
51	L-15	29	0	0	0	0	0.171632	0.017403	0	0	0
52	L-15	29	0	0	0	0	0.340194	0.034039	0	0	0
53	L-16	47	0	0	0	0	0.556324	0.056411	0	0	0
54	L-16	47	0	0	0	0	0.556324	0.056411	0	0	0
55	L-16	47	0	0	0	0	0.551349	0.055167	0	0	0
56	L-16	47	0	0	0	0	0.278162	0.028205	0	0	0
57	L-17	35	0	0	0	0	0.207142	0.021004	0	0	0
58	L-17	35	0	0	0	0	0.207142	0.021004	0	0	0
59	L-17	35	0	0	0	0	0.410579	0.041082	0	0	0
60	L-18	60	0	0	0	0	0.133659	0.013627	0	0	0
61	L-18	60	0	0	0	0	0.710201	0.072014	0	0	0
62	L-18	60	0	0	0	0	0.710201	0.072014	0	0	0
63	L-18	60	0	0	0	0	0.70385	0.070426	0	0	0
64	P-19	25	0	0	0	0	0.147959	0.015003	0	0	0
65	P-19	25	0	0	0	0	0.147959	0.015003	0	0	0
66	P-19	25	0	0	0	0	0.146635	0.014672	0	0	0
67	P-19	25	0	0	0	0	0.073979	0.007501	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
68	P-20	13	0	0	0	0	0.076938	0.007801	0	0	0
69	P-20	13	0	0	0	0	0.076938	0.007801	0	0	0
70	P-21	13	0	0	0	0	0.028959	0.002952	0	0	0
71	P-21	13	0	0	0	0	0.076938	0.007801	0	0	0
72	P-21	13	0	0	0	0	0.076938	0.007801	0	0	0
73	P-22	13	0	0	0	0	0.038899	0.004008	0	0	0
74	P-22	13	0	0	0	0	0.038899	0.004008	0	0	0
75	P-22	13	0	0	0	0	0.07625	0.007629	0	0	0
76	P-22	13	0	0	0	0	0.01945	0.002004	0	0	0
77	P-23	7	0	0	0	0	0.020946	0.002158	0	0	0
78	P-23	7	0	0	0	0	0.020946	0.002158	0	0	0
79	P-24	6	0	0	0	0	0.017953	0.00185	0	0	0
80	P-24	6	0	0	0	0	0.017953	0.00185	0	0	0
81	P-25	12	0	0	0	0	0.035907	0.0037	0	0	0
82	P-25	12	0	0	0	0	0.035907	0.0037	0	0	0
83	P-25	12	0	0	0	0	0.070385	0.007043	0	0	0
84	P-25	12	0	0	0	0	0.017953	0.00185	0	0	0
85	P-26	24	0	0	0	0	0.071814	0.0074	0	0	0
86	P-26	24	0	0	0	0	0.071814	0.0074	0	0	0
87	P-27	23	0	0	0	0	0.068822	0.007092	0	0	0
88	P-27	23	0	0	0	0	0.068822	0.007092	0	0	0
89	P-28	26	0	0	0	0	0.115838	0.01181	0	0	0
90	P-28	26	0	0	0	0	0.115838	0.01181	0	0	0
91	P-28	26	0	0	0	0	0.115838	0.01181	0	0	0
92	P-28	26	0	0	0	0	0.231675	0.023619	0	0	0
93	L-29	51	0	0	0	0	0.34083	0.034748	0	0	0
94	L-29	51	0	0	0	0	0.34083	0.034748	0	0	0
95	L-29	51	0	0	0	0	0.22722	0.023165	0	0	0
96	L-29	51	0	0	0	0	0.598273	0.059862	0	0	0
97	L-29	51	0	0	0	0	0.22722	0.023165	0	0	0
98	P-30	200	0	0	0	0	1.782118	0.181688	0	0	0
99	P-30	200	0	0	0	0	1.782118	0.181688	0	0	0
100	P-30	200	0	0	0	0	0.891059	0.090844	0	0	0
101	P-30	200	0	0	0	0	0.891059	0.090844	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
102	P-31	148	0	0	0	0	1.318767	0.134449	0	0	0
103	P-31	148	0	0	0	0	1.318767	0.134449	0	0	0
104	P-31	148	0	0	0	0	0.659384	0.067225	0	0	0
105	P-32	200	0	0	0	0	0.61168	0.064973	0	0	0
106	P-32	200	0	0	0	0	0.61168	0.064973	0	0	0
107	P-32	200	0	0	0	0	0.30584	0.032487	0	0	0
108	P-32	200	0	0	0	0	0.30584	0.032487	0	0	0
109	P-33	150	0	0	0	0	0.45876	0.04873	0	0	0
110	P-33	150	0	0	0	0	0.45876	0.04873	0	0	0
111	P-33	150	0	0	0	0	0.22938	0.024365	0	0	0
112	P-36	77	0	0	0	0	0.235497	0.025015	0	0	0
113	P-36	77	0	0	0	0	0.235497	0.025015	0	0	0
114	P-36	77	0	0	0	0	0.117748	0.012507	0	0	0
115	L-37	198	0	0	0	0	4.66113	0.468742	0	0	0
116	L-37	198	0	0	0	0	4.66113	0.468742	0	0	0
117	L-37	198	0	0	0	0	1.161353	0.116203	0	0	0
118	L-38	140	0	0	0	0	3.295749	0.331434	0	0	0
119	L-38	140	0	0	0	0	1.647874	0.165717	0	0	0
120	L-38	140	0	0	0	0	1.642317	0.164328	0	0	0
121	L-39	52	0	0	0	0	0.387272	0.039652	0	0	0
122	L-39	52	0	0	0	0	0.096818	0.009913	0	0	0
123	L-39	52	0	0	0	0	0	0	0	0	0
124	L-01	51	0	0	0	0	0.152605	0.015725	0	0	0
125	L-02	76	0	0	0	0	1.364465	0.140597	0	0	0
126	L-03	127	0	0	0	0	6.080248	0.62652	0	0	0
127	L-04	224	0	0	0	0	6.702635	0.690652	0	0	0
128	P-05	37	0	0	0	0	0.608922	0.062745	0	0	0
129	P-06	26	0	0	0	0	0.427891	0.044091	0	0	0
130	P-07	20	0	0	0	0	0.658295	0.067832	0	0	0
131	P-08	28	0	0	0	0	0.460806	0.047482	0	0	0
132	P-09	23	0	0	0	0	0.378519	0.039003	0	0	0
133	P-10	38	0	0	0	0	1.25076	0.128881	0	0	0
134	P-12	51	0	0	0	0	0.839326	0.086486	0	0	0
135	P-13	26	0	0	0	0	0.427891	0.044091	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
136	P-14	111	0	0	0	0	3.653535	0.376467	0	0	0
137	L-15	29	0	0	0	0	0.347101	0.035766	0	0	0
138	L-16	47	0	0	0	0	0.773496	0.079702	0	0	0
139	L-17	35	0	0	0	0	0.576008	0.059353	0	0	0
140	L-18	60	0	0	0	0	1.974884	0.203496	0	0	0
141	P-19	25	0	0	0	0	0.48624	0.050103	0	0	0
142	P-20	13	0	0	0	0	0.213946	0.022045	0	0	0
143	P-21	13	0	0	0	0	0.116698	0.012025	0	0	0
144	P-22	13	0	0	0	0	0.116698	0.012025	0	0	0
145	P-23	7	0	0	0	0	0.062837	0.006475	0	0	0
146	P-24	6	0	0	0	0	0.05386	0.00555	0	0	0
147	P-25	12	0	0	0	0	0.107721	0.0111	0	0	0
148	P-26	24	0	0	0	0	0.215442	0.0222	0	0	0
149	P-27	23	0	0	0	0	0.206465	0.021275	0	0	0
150	P-28	26	0	0	0	0	0.233395	0.024049	0	0	0
151	L-29	51	0	0	0	0	0.534116	0.055036	0	0	0
152	P-30	200	0	0	0	0	1.496124	0.154163	0	0	0
153	P-31	148	0	0	0	0	0	0	0	0	0
154	P-32	200	0	0	0	0	1.496124	0.154163	0	0	0
155	P-33	150	0	0	0	0	0	0	0	0	0
156	P-36	77	0	0	0	0	0	0	0	0	0
157	L-37	198	0	0	0	0	4.739721	0.48839	0	0	0
158	L-38	140	0	0	0	0	1.675659	0.172663	0	0	0
159	L-39	52	0	0	0	0	0.777984	0.080165	0	0	0

Table 27: On-Road Dust Controlled Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	L-01	51	0	0	0	0	0.153597	0.015793	0	0	0
2	L-02	76	0	0	0	0	0.225872	0.022781	0	0	0
3	L-02	76	0	0	0	0	0.074984	0.008219	0	0	0
4	L-02	76	0	0	0	0	0.149969	0.016438	0	0	0
5	L-02	76	0	0	0	0	0.149969	0.016438	0	0	0
6	L-02	76	0	0	0	0	0.037492	0.004109	0	0	0
7	L-03	127	0	0	0	0	0.377445	0.038068	0	0	0
8	L-03	127	0	0	0	0	0.250606	0.027468	0	0	0
9	L-03	127	0	0	0	0	0.250606	0.027468	0	0	0
10	L-03	127	0	0	0	0	0.250606	0.027468	0	0	0
11	L-03	127	0	0	0	0	0.187954	0.020601	0	0	0
12	L-04	224	0	0	0	0	0.442013	0.048448	0	0	0
13	L-04	224	0	0	0	0	0.442013	0.048448	0	0	0
14	L-04	224	0	0	0	0	0.221007	0.024224	0	0	0
15	P-05	37	0	0	0	0	0.113881	0.01207	0	0	0
16	P-05	37	0	0	0	0	0.113881	0.01207	0	0	0
17	P-05	37	0	0	0	0	0.109964	0.011091	0	0	0
18	P-05	37	0	0	0	0	0.05694	0.006035	0	0	0
19	P-06	26	0	0	0	0	0.040012	0.004241	0	0	0
20	P-06	26	0	0	0	0	0.040012	0.004241	0	0	0
21	P-06	26	0	0	0	0	0.077272	0.007793	0	0	0
22	P-07	20	0	0	0	0	0.011707	0.001265	0	0	0
23	P-07	20	0	0	0	0	0.061557	0.006524	0	0	0
24	P-07	20	0	0	0	0	0.061557	0.006524	0	0	0
25	P-07	20	0	0	0	0	0.05944	0.005995	0	0	0
26	P-08	28	0	0	0	0	0.08618	0.009134	0	0	0
27	P-08	28	0	0	0	0	0.08618	0.009134	0	0	0
28	P-08	28	0	0	0	0	0.083216	0.008393	0	0	0
29	P-08	28	0	0	0	0	0.04309	0.004567	0	0	0
30	P-09	23	0	0	0	0	0.035395	0.003751	0	0	0
31	P-09	23	0	0	0	0	0.035395	0.003751	0	0	0
32	P-09	23	0	0	0	0	0.068356	0.006894	0	0	0
33	P-10	38	0	0	0	0	0.022244	0.002403	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
34	P-10	38	0	0	0	0	0.116958	0.012396	0	0	0
35	P-10	38	0	0	0	0	0.116958	0.012396	0	0	0
36	P-10	38	0	0	0	0	0.112936	0.01139	0	0	0
37	P-11	25	0	0	0	0	0.038473	0.004078	0	0	0
38	P-12	51	0	0	0	0	0.15697	0.016637	0	0	0
39	P-12	51	0	0	0	0	0.15697	0.016637	0	0	0
40	P-12	51	0	0	0	0	0.151572	0.015287	0	0	0
41	P-12	51	0	0	0	0	0.078485	0.008318	0	0	0
42	P-13	26	0	0	0	0	0.040012	0.004241	0	0	0
43	P-13	26	0	0	0	0	0.040012	0.004241	0	0	0
44	P-13	26	0	0	0	0	0.077272	0.007793	0	0	0
45	P-14	111	0	0	0	0	0.064976	0.007019	0	0	0
46	P-14	111	0	0	0	0	0.341642	0.036209	0	0	0
47	P-14	111	0	0	0	0	0.341642	0.036209	0	0	0
48	P-14	111	0	0	0	0	0.329893	0.033272	0	0	0
49	L-15	29	0	0	0	0	0.044629	0.00473	0	0	0
50	L-15	29	0	0	0	0	0.044629	0.00473	0	0	0
51	L-15	29	0	0	0	0	0.044629	0.00473	0	0	0
52	L-15	29	0	0	0	0	0.086188	0.008693	0	0	0
53	L-16	47	0	0	0	0	0.144659	0.015332	0	0	0
54	L-16	47	0	0	0	0	0.144659	0.015332	0	0	0
55	L-16	47	0	0	0	0	0.139684	0.014088	0	0	0
56	L-16	47	0	0	0	0	0.07233	0.007666	0	0	0
57	L-17	35	0	0	0	0	0.053862	0.005709	0	0	0
58	L-17	35	0	0	0	0	0.053862	0.005709	0	0	0
59	L-17	35	0	0	0	0	0.10402	0.010491	0	0	0
60	L-18	60	0	0	0	0	0.035122	0.003794	0	0	0
61	L-18	60	0	0	0	0	0.184671	0.019573	0	0	0
62	L-18	60	0	0	0	0	0.184671	0.019573	0	0	0
63	L-18	60	0	0	0	0	0.17832	0.017985	0	0	0
64	P-19	25	0	0	0	0	0.038473	0.004078	0	0	0
65	P-19	25	0	0	0	0	0.038473	0.004078	0	0	0
66	P-19	25	0	0	0	0	0.03715	0.003747	0	0	0
67	P-19	25	0	0	0	0	0.019237	0.002039	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
68	P-20	13	0	0	0	0	0.020006	0.00212	0	0	0
69	P-20	13	0	0	0	0	0.020006	0.00212	0	0	0
70	P-21	13	0	0	0	0	0.00761	0.000822	0	0	0
71	P-21	13	0	0	0	0	0.020006	0.00212	0	0	0
72	P-21	13	0	0	0	0	0.020006	0.00212	0	0	0
73	P-22	13	0	0	0	0	0.010433	0.001168	0	0	0
74	P-22	13	0	0	0	0	0.010433	0.001168	0	0	0
75	P-22	13	0	0	0	0	0.019318	0.001948	0	0	0
76	P-22	13	0	0	0	0	0.005217	0.000584	0	0	0
77	P-23	7	0	0	0	0	0.005618	0.000629	0	0	0
78	P-23	7	0	0	0	0	0.005618	0.000629	0	0	0
79	P-24	6	0	0	0	0	0.004815	0.000539	0	0	0
80	P-24	6	0	0	0	0	0.004815	0.000539	0	0	0
81	P-25	12	0	0	0	0	0.00963	0.001078	0	0	0
82	P-25	12	0	0	0	0	0.00963	0.001078	0	0	0
83	P-25	12	0	0	0	0	0.017832	0.001798	0	0	0
84	P-25	12	0	0	0	0	0.004815	0.000539	0	0	0
85	P-26	24	0	0	0	0	0.019261	0.002156	0	0	0
86	P-26	24	0	0	0	0	0.019261	0.002156	0	0	0
87	P-27	23	0	0	0	0	0.018458	0.002066	0	0	0
88	P-27	23	0	0	0	0	0.018458	0.002066	0	0	0
89	P-28	26	0	0	0	0	0.030439	0.003288	0	0	0
90	P-28	26	0	0	0	0	0.030439	0.003288	0	0	0
91	P-28	26	0	0	0	0	0.030439	0.003288	0	0	0
92	P-28	26	0	0	0	0	0.060878	0.006576	0	0	0
93	L-29	51	0	0	0	0	0.089561	0.009674	0	0	0
94	L-29	51	0	0	0	0	0.089561	0.009674	0	0	0
95	L-29	51	0	0	0	0	0.059707	0.00645	0	0	0
96	L-29	51	0	0	0	0	0.151572	0.015287	0	0	0
97	L-29	51	0	0	0	0	0.059707	0.00645	0	0	0
98	P-30	200	0	0	0	0	0.468293	0.050585	0	0	0
99	P-30	200	0	0	0	0	0.468293	0.050585	0	0	0
100	P-30	200	0	0	0	0	0.234147	0.025293	0	0	0
101	P-30	200	0	0	0	0	0.234147	0.025293	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
102	P-31	148	0	0	0	0	0.346537	0.037433	0	0	0
103	P-31	148	0	0	0	0	0.346537	0.037433	0	0	0
104	P-31	148	0	0	0	0	0.173268	0.018717	0	0	0
105	P-32	200	0	0	0	0	0.173739	0.021272	0	0	0
106	P-32	200	0	0	0	0	0.173739	0.021272	0	0	0
107	P-32	200	0	0	0	0	0.086869	0.010636	0	0	0
108	P-32	200	0	0	0	0	0.086869	0.010636	0	0	0
109	P-33	150	0	0	0	0	0.130304	0.015954	0	0	0
110	P-33	150	0	0	0	0	0.130304	0.015954	0	0	0
111	P-33	150	0	0	0	0	0.065152	0.007977	0	0	0
112	P-36	77	0	0	0	0	0.066889	0.00819	0	0	0
113	P-36	77	0	0	0	0	0.066889	0.00819	0	0	0
114	P-36	77	0	0	0	0	0.033445	0.004095	0	0	0
115	L-37	198	0	0	0	0	1.192632	0.12263	0	0	0
116	L-37	198	0	0	0	0	1.192632	0.12263	0	0	0
117	L-37	198	0	0	0	0	0.294229	0.029675	0	0	0
118	L-38	140	0	0	0	0	0.843275	0.086708	0	0	0
119	L-38	140	0	0	0	0	0.421638	0.043354	0	0	0
120	L-38	140	0	0	0	0	0.416081	0.041965	0	0	0
121	L-39	52	0	0	0	0	0.10261	0.011247	0	0	0
122	L-39	52	0	0	0	0	0.025653	0.002812	0	0	0
123	L-39	52	0	0	0	0	0	0	0	0	0
124	L-01	51	0	0	0	0	0.04093	0.004581	0	0	0
125	L-02	76	0	0	0	0	0.365958	0.040959	0	0	0
126	L-03	127	0	0	0	0	1.630761	0.182518	0	0	0
127	L-04	224	0	0	0	0	1.797689	0.201201	0	0	0
128	P-05	37	0	0	0	0	0.163317	0.018279	0	0	0
129	P-06	26	0	0	0	0	0.114763	0.012844	0	0	0
130	P-07	20	0	0	0	0	0.176559	0.019761	0	0	0
131	P-08	28	0	0	0	0	0.123591	0.013833	0	0	0
132	P-09	23	0	0	0	0	0.101521	0.011362	0	0	0
133	P-10	38	0	0	0	0	0.335462	0.037545	0	0	0
134	P-12	51	0	0	0	0	0.225112	0.025195	0	0	0
135	P-13	26	0	0	0	0	0.114763	0.012844	0	0	0

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
136	P-14	111	0	0	0	0	0.979901	0.109672	0	0	0
137	L-15	29	0	0	0	0	0.093095	0.010419	0	0	0
138	L-16	47	0	0	0	0	0.207457	0.023219	0	0	0
139	L-17	35	0	0	0	0	0.154489	0.017291	0	0	0
140	L-18	60	0	0	0	0	0.529676	0.059282	0	0	0
141	P-19	25	0	0	0	0	0.130413	0.014596	0	0	0
142	P-20	13	0	0	0	0	0.057382	0.006422	0	0	0
143	P-21	13	0	0	0	0	0.031299	0.003503	0	0	0
144	P-22	13	0	0	0	0	0.031299	0.003503	0	0	0
145	P-23	7	0	0	0	0	0.016853	0.001886	0	0	0
146	P-24	6	0	0	0	0	0.014446	0.001617	0	0	0
147	P-25	12	0	0	0	0	0.028891	0.003234	0	0	0
148	P-26	24	0	0	0	0	0.057783	0.006467	0	0	0
149	P-27	23	0	0	0	0	0.055375	0.006198	0	0	0
150	P-28	26	0	0	0	0	0.062598	0.007006	0	0	0
151	L-29	51	0	0	0	0	0.143253	0.016033	0	0	0
152	P-30	200	0	0	0	0	0.40127	0.044911	0	0	0
153	P-31	148	0	0	0	0	0	0	0	0	0
154	P-32	200	0	0	0	0	0.40127	0.044911	0	0	0
155	P-33	150	0	0	0	0	0	0	0	0	0
156	P-36	77	0	0	0	0	0	0	0	0	0
157	L-37	198	0	0	0	0	1.271223	0.142278	0	0	0
158	L-38	140	0	0	0	0	0.449422	0.0503	0	0	0
159	L-39	52	0	0	0	0	0.20866	0.023354	0	0	0

Table 28: Earth Moving Uncontrolled Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Quantity	Hours Per Day	Acres Graded	Hours Bulldozed	EF_PM10_Grading	EF_PM2.5_Grading	PM10	PM2.5
1	L-02	Site Development	Motor Grader	2	5	0.3125	0	1.060500375	0.114509168	0.331406	0.035784
2	L-02	Site Development	Scraper	2	5	0.625	0	1.060500375	0.114509168	0.662813	0.071568
3	L-15	Access Road Construction	Motor Grader	1	8	0.5	0	1.060500375	0.114509168	0.53025	0.057255
4	L-38	Site & ROW Restoration	Motor Grader	1	8	0.5	0	1.060500375	0.114509168	0.53025	0.057255

Table 29: Earth Moving Uncontrolled Emissions (tons)

Count	Activity Index	Days Used	PM10	PM2.5
1	L-02	76	0.012593	0.00136
2	L-02	76	0.025187	0.00272
3	L-15	29	0.007689	0.00083
4	L-38	140	0.037118	0.004008

Table 30: Earth Moving Controlled Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Quantity	Hours Per Day	Acres Graded	Hours Bulldozed	EF_PM10_Grading	EF_PM2.5_Grading	PM10	PM2.5
1	L-02	Site Development	Motor Grader	2	5	0.3125	0	0.413595146	0.044658576	0.129248	0.013956
2	L-02	Site Development	Scraper	2	5	0.625	0	0.413595146	0.044658576	0.258497	0.027912
3	L-15	Access Road Construction	Motor Grader	1	8	0.5	0	0.413595146	0.044658576	0.206798	0.022329
4	L-38	Site & ROW Restoration	Motor Grader	1	8	0.5	0	0.413595146	0.044658576	0.206798	0.022329

Table 31: Earth Moving Controlled Emissions (tons)

Count	Activity Index	Days Used	PM10	PM2.5
1	L-02	76	0.004911	0.00053
2	L-02	76	0.009823	0.001061
3	L-15	29	0.002999	0.000324
4	L-38	140	0.014476	0.001563

Table 32: Light-Duty Helicopter Emissions

Helicopter Model	Hughes 500
Engine Type	DDA250-C18
Fuel S Content by Weight	0.3 %
Fuel Burn Rate	32 gal/hr
Jet Fuel density	7 lbs/gal
Fuel Type	Jet Fuel A
CO2 emission factor	72.22 kg CO2/MM (ARB 2012)
High Heat Value	0.135 MMBtu/gal (ARB 2012)

	fuel (kg)	Nox (g)	HC	CO	PM	Fugitive PM
LTO	16.4	59.5	438.2	571.2	2.3	750
Run	98.8	480	960	1200	16	

Activity	Emission Rate						
	HC	CO	NOx	SOx	PM10	PM2.5	CO2
Flight (lbs/hr)	2.112	2.64	1.056	0.018	0.0352	0.032384	686
LTO (lbs)	0.96404	1.25664	0.1309	0.010	1.65506	0.351155	52

Activity	Working Hrs	Emissions lbs/day						
		HC	CO	NOx	SOx	PM10	PM2.5	CO2
Flight	6	12.672	15.84	6.336	0.10868	0.2112	0.194304	4114
LTO	2	0.96404	1.25664	0.1309	0.010022	1.65506	0.351155	52
TOTAL		13.63604	17.09664	6.4669	0.118702	1.86626	0.545459	4165

Construction Phase	Working Days	Emissions tons							MT
		HC	CO	NOx	SOx	PM10	PM2.5	CO2	
P-07	20	0.1364	0.1710	0.0647	0.0012	0.0187	0.0055	41.6546	
P-10	76	0.5182	0.6497	0.2457	0.0045	0.0709	0.0207	158.2875	
P-14	222	1.5136	1.8977	0.7178	0.0132	0.2072	0.0605	462.3663	
L-18	60	0.4091	0.5129	0.1940	0.0036	0.0560	0.0164	124.9639	
P-21	13	0.0886	0.1111	0.0420	0.0008	0.0121	0.0035	27.0755	

NOTES:

California Air Resources Board (ARB). 2012. Regulation for the Mandatory Reporting of Greenhouse Gas Emissions. Petroleum Fuels. Section 95115(c)(1)
 Ref: Swiss Confederation, DETEC and FOCA "Guidance on the Determination of Helicopter Emissions", 2015

Engine DDA250-C18

Fugitive dust estimates from Emission Factor Source: Dr. J. A. Gillies et. al. December 31, 2007. Particulate Matter Emissions for Dust from Unique Military Activities.

ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

Table 33: Electricity Consumption Emission Factors (pounds per Megawatt-hour)

Utility	Year	CO2	CH4	N2O	SF6
PG&E	2028	203.983	0.033	0.004	0

Note: Units in lbs/MWh

Table 34: GHG Emissions from Electricity Consumption (metric tons per year)

Facility	Use	CO2	CH4	N2O	SF6	CO2e
Manning Substation	385400	35.659157	0.0057689	0.0006993	0	36.011758

Note: Use in kWh

Table 35: GHG Emissions from Electricity Consumption - Post Modification (metric tons per year)

Facility	Use	CO2	CH4	N2O	SF6	CO2e
Manning Modification	420440	38.901235	0.0062934	0.0007628	0	39.285893

Note: Use in kWh

Table 36: SF6 Emissions (metric tons/year)

Substation	Feature	Quantity	SF6 (lbs each)	Total Volume (lbs)	Leak Rate	Annual Emissions	CO2e
Manning	230 kV CB	12	135	1620	1	0.00735	172.6827
Manning	230 kV Pipe	1	5739	5739	1	0.02603	611.7443
Manning	500 kV CB	9	595	5355	1	0.02429	570.8121
Manning	500 kV Pipe	1	13880	13880	1	0.06296	1479.528
Total				26594		0.12063	2834.767

Table 37: SF6 Emissions (metric tons/year) Post Modification

Substation	Feature	Quantity	SF6 (lbs each)	Total Volume (lbs)	Leak Rate	Annual Emissions	CO2e
Manning	230 kV CB	24	135	3240	1	0.01470	345.3653
Manning	230 kV Pipe	1	5739	5739	1	0.02603	611.7443
Manning	500 kV CB	18	595	10710	1	0.04858	1141.624
Manning	500 kV Pipe	1	13880	13880	1	0.06296	1479.528
Total				33569		0.15227	3578.262

Table 38: O&M Uncontrolled Annual Emissions (tons)

Equipment Name	Fuel Type	Trips	Year	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O	CO2e	CO2e (Metric Tons)	Fuel Consumption (Gallons)
1-Ton Truck, 4x4	Diesel	60	2026	120	7200	75	5400	1800	passenger	0.0011855	0.0066594	0.0080742	0.0000248	0.0010674	0.0009355	2.615752	5.51E-05	0.000412	2.73993826	2.48563089	235512.3697

Note: Unless noted, emissions are in tons

Table 39: Total Uncontrolled Daily Emissions (pounds/day)

Index	Name	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
L-01	Survey	0.059753	0.092858	1.152106	0.002753	29.5411	2.989569	278.4867	0.005724	0.007517
L-02	Site Development	2.781136	23.12714	25.28528	0.085801	102.3416	11.19449	9063.937	0.289496	0.33221
L-03	Below-Grade Construction	3.20986	26.44081	34.95472	0.103589	176.735	19.27196	10856.27	0.278138	0.591366
L-04	Above-Grade Construction (Phase 1)	3.043445	24.74292	24.19064	0.058177	98.49805	11.20895	5950.749	0.182579	0.197497
L-39	Above-Grade Construction (Phase 2)	0.649314	4.640216	8.959281	0.019448	48.72144	5.123343	1768.311	0.050808	0.043607
P-05	Structure Foundation Installation	1.679499	15.85858	17.99465	0.074751	116.3389	12.33371	7970.275	0.209949	0.480509
P-06	Structure Installation	1.892939	15.59732	14.8144	0.047567	80.7715	8.766617	5078.015	0.176973	0.110469
P-07	Conductor Installation	16.12803	39.02822	27.88328	0.177119	144.0562	15.86493	10345.57	0.190881	0.195334
P-08	Structure Foundation Installation	1.918711	17.35678	19.56174	0.080541	116.402	12.39176	8597.11	0.235376	0.485594
P-09	Structure Installation	1.805062	14.7145	14.29273	0.045854	80.73477	8.732831	4892.504	0.169448	0.108964
P-10	Conductor Installation	29.76407	56.12486	34.35018	0.295822	145.9224	16.41039	14511.03	0.190881	0.195334
P-11	Access Construction	0.386149	3.195537	3.717802	0.010839	11.98639	1.335378	1169.596	0.044608	0.031205
P-12	Structure Foundation Installation	1.397235	13.25705	15.42159	0.062978	116.2534	12.25512	6696.11	0.158264	0.470172
P-13	Structure Installation	1.56585	13.21629	12.72564	0.040065	80.67167	8.674777	4265.669	0.144021	0.103879
P-14	Conductor Installation	29.76407	56.12486	34.35018	0.295822	145.9224	16.41039	14511.03	0.190881	0.195334
L-15	Access Road Construction	1.873021	17.90184	18.10145	0.049132	84.25254	9.159901	5244.009	0.159787	0.217035
L-16	Structure Foundation Installation	1.636447	14.75525	16.98868	0.068767	116.3166	12.31317	7322.946	0.183691	0.475257
L-17	Structure Installation	1.805062	14.7145	14.29273	0.045854	80.73477	8.732831	4892.504	0.169448	0.108964
L-18	Conductor Installation	16.12803	39.02822	27.88328	0.177119	144.0562	15.86493	10345.57	0.190881	0.195334
P-19	Structure Foundation Installation	1.036062	9.139847	10.94637	0.048327	80.66868	8.51565	5133.697	0.141116	0.259431
P-20	Structure Installation	1.393654	11.91758	11.50046	0.032744	57.16926	6.295641	3478.296	0.120148	0.067024
P-21	Conductor Installation	15.1162	30.84252	17.17103	0.154545	48.58627	5.809468	7997.509	0.131613	0.10044
P-22	Structure Foundation Installation	0.64923	6.375822	6.357127	0.031736	44.97984	4.810155	3372.181	0.079414	0.235939
P-23	Structure Installation	0.999412	8.591249	8.163342	0.023073	30.35067	3.457079	2455.604	0.085629	0.052154
P-24	Conductor Installation	0.516652	3.87437	4.979597	0.014804	30.14492	3.267788	1559.901	0.049295	0.044888
P-25	Structure Foundation Installation	0.64923	6.375822	6.357127	0.031736	44.97984	4.810155	3372.181	0.079414	0.235939
P-26	Structure Installation	0.999412	8.591249	8.163342	0.023073	30.35067	3.457079	2455.604	0.085629	0.052154
P-27	Conductor Installation	0.516652	3.87437	4.979597	0.014804	30.14492	3.267788	1559.901	0.049295	0.044888
P-28	Distribution Extension to Substation	2.130015	21.15783	19.83781	0.070097	63.61997	7.308358	7491.376	0.205604	0.420497
L-29	Fiber Extension to Substation	2.229826	22.22572	21.14201	0.063004	90.2194	10.10342	6721.687	0.177555	0.402311
P-30	Tranquility Outdoor	1.907375	18.27121	17.75581	0.060795	69.29623	7.725052	6499.604	0.197642	0.291394
P-31	Tranquility Indoor	0.728918	7.791569	8.488724	0.023889	44.89573	4.828945	2546.708	0.07236	0.14359
P-32	Panoche Outdoor	1.907375	18.27121	17.75581	0.060795	34.1831	4.223591	6499.604	0.197642	0.291394
P-33	Panoche Indoor	0.728918	7.791569	8.488724	0.023889	15.63479	1.911061	2546.708	0.07236	0.14359
P-36	Substation Modifications	0.728918	7.791569	8.488724	0.023889	15.63479	1.911061	2546.708	0.07236	0.14359
L-37	Commissioning and Testing	0.63241	3.324979	7.865467	0.021378	154.0568	15.78745	2206.627	0.051942	0.102858
L-38	Site & ROW Restoration	1.735987	16.74029	15.7903	0.045049	119.2769	12.57787	4796.127	0.141668	0.194314

Table 40: Total Controlled Daily Emissions (pounds)

Index	Name	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
L-01	Survey	0.059753	0.092858	1.152106	0.002753	7.644021	0.804517	278.4867	0.005724	0.007517
L-02	Site Development	1.565669	11.38876	35.71913	0.085801	27.39864	3.362261	9063.937	0.289496	0.33221
L-03	Below-Grade Construction	2.623489	20.57738	41.46616	0.103589	47.86883	6.235735	10856.27	0.278138	0.591366
L-04	Above-Grade Construction (Phase 1)	2.43726	18.07883	27.88688	0.058177	27.05065	3.850959	5950.749	0.182579	0.197497
L-39	Above-Grade Construction (Phase 2)	0.649314	4.640216	8.959281	0.019448	13.13868	1.572634	1768.311	0.050808	0.043607
P-05	Structure Foundation Installation	1.071802	9.435709	26.26958	0.074751	30.70559	3.600977	7970.275	0.209949	0.480509
P-06	Structure Installation	0.94345	5.988369	21.25513	0.047567	21.25374	2.50734	5078.015	0.176973	0.110469
P-07	Conductor Installation	14.91359	25.27836	31.56025	0.177119	39.45871	4.950657	10345.57	0.190881	0.195334
P-08	Structure Foundation Installation	1.176129	10.04179	28.97662	0.080541	30.73027	3.624395	8597.11	0.235376	0.485594
P-09	Structure Installation	0.908294	5.699094	20.43902	0.045854	21.24192	2.496256	4892.504	0.169448	0.108964
P-10	Conductor Installation	28.54963	42.375	38.02715	0.295822	41.32497	5.496116	14511.03	0.190881	0.195334
P-11	Access Construction	0.24916	2.015664	5.288617	0.010839	3.189335	0.427066	1169.596	0.044608	0.031205
P-12	Structure Foundation Installation	0.910295	8.312437	20.8974	0.062978	30.66604	3.563142	6696.11	0.158264	0.470172
P-13	Structure Installation	0.803967	5.093016	17.73198	0.040065	21.21724	2.472838	4265.669	0.144021	0.103879
P-14	Conductor Installation	28.54963	42.375	38.02715	0.295822	41.32497	5.496116	14511.03	0.190881	0.195334
L-15	Access Road Construction	0.934382	7.712405	21.10509	0.049132	22.20139	2.627884	5244.009	0.159787	0.217035
L-16	Structure Foundation Installation	1.014622	8.918515	23.60445	0.068767	30.69072	3.58656	7322.946	0.183691	0.475257
L-17	Structure Installation	0.908294	5.699094	20.43902	0.045854	21.24192	2.496256	4892.504	0.169448	0.108964
L-18	Conductor Installation	14.91359	25.27836	31.56025	0.177119	39.45871	4.950657	10345.57	0.190881	0.195334
P-19	Structure Foundation Installation	0.69869	5.104166	17.07995	0.048327	21.40952	2.49323	5133.697	0.141116	0.259431
P-20	Structure Installation	0.716038	4.380631	15.23042	0.032744	15.24582	1.853331	3478.296	0.120148	0.067024
P-21	Conductor Installation	14.35336	22.19441	21.87275	0.154545	14.28721	2.096012	7997.509	0.131613	0.10044
P-22	Structure Foundation Installation	0.432616	3.818393	9.691585	0.031736	12.04306	1.450548	3372.181	0.079414	0.235939
P-23	Structure Installation	0.513509	3.21265	10.82262	0.023073	8.225166	1.063871	2455.604	0.085629	0.052154
P-24	Conductor Installation	0.328954	1.701332	6.469253	0.014804	8.160955	1.003775	1559.901	0.049295	0.044888
P-25	Structure Foundation Installation	0.432616	3.818393	9.691585	0.031736	12.04306	1.450548	3372.181	0.079414	0.235939
P-26	Structure Installation	0.513509	3.21265	10.82262	0.023073	8.225166	1.063871	2455.604	0.085629	0.052154
P-27	Conductor Installation	0.328954	1.701332	6.469253	0.014804	8.160955	1.003775	1559.901	0.049295	0.044888
P-28	Distribution Extension to Substation	1.36473	12.58382	26.5473	0.070097	17.29022	2.405914	7491.376	0.205604	0.420497
L-29	Fiber Extension to Substation	1.628117	15.48347	24.88944	0.063004	24.24681	3.292107	6721.687	0.177555	0.402311
P-30	Tranquility Outdoor	1.241735	11.09437	24.36022	0.060795	18.65704	2.449609	6499.604	0.197642	0.291394
P-31	Tranquility Indoor	0.512738	5.431209	9.652527	0.023889	11.94888	1.459142	2546.708	0.07236	0.14359
P-32	Panoche Outdoor	1.241735	11.09437	24.36022	0.060795	9.820406	1.57021	6499.604	0.197642	0.291394
P-33	Panoche Indoor	0.512738	5.431209	9.652527	0.023889	4.585018	0.72631	2546.708	0.07236	0.14359
P-36	Substation Modifications	0.512738	5.431209	9.652527	0.023889	4.585018	0.72631	2546.708	0.07236	0.14359
L-37	Commissioning and Testing	0.51259	1.976008	8.534647	0.021378	40.13536	4.373587	2206.627	0.051942	0.102858
L-38	Site & ROW Restoration	1.735987	16.74029	15.7903	0.045049	31.36509	3.80274	4796.127	0.141668	0.194314

Table 41: Total Uncontrolled On-Site Daily Emissions (pounds/day)

Index	Name	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
L-01	Survey	0.011951	0.018572	0.230421	0.000551	5.908221	0.597914	55.69734	0.001145	0.001503
L-02	Site Development	2.441427	20.81864	20.336	0.064942	21.84853	2.86283	6900.578	0.264282	0.107719
L-03	Below-Grade Construction	2.578343	22.11227	24.71792	0.06065	36.28799	4.7201	6410.183	0.227577	0.152663
L-04	Above-Grade Construction (Phase 1)	2.643491	23.32011	17.88909	0.038996	20.63875	3.105798	3984.073	0.14985	0.062166
L-39	Above-Grade Construction (Phase 2)	0.455661	4.232228	5.553958	0.011188	9.821123	1.095357	930.4203	0.033557	0.013401
P-05	Structure Foundation Installation	1.359946	12.40648	13.68816	0.048345	23.60278	2.774947	5208.814	0.18862	0.125428
P-06	Structure Installation	1.681368	14.87697	11.42456	0.037763	16.63431	2.194937	4074.591	0.159481	0.046911
P-07	Conductor Installation	15.70453	37.5779	21.11225	0.157174	30.98457	4.235255	8303.113	0.155879	0.062607
P-08	Structure Foundation Installation	1.599159	13.90468	15.25524	0.054135	23.66588	2.833	5835.649	0.214047	0.130513
P-09	Structure Installation	1.593491	13.99415	10.90289	0.03605	16.59759	2.16115	3889.081	0.151956	0.045406
P-10	Conductor Installation	29.34057	54.67454	27.57915	0.275876	32.85083	4.780714	12468.57	0.155879	0.062607
P-11	Access Construction	0.333459	2.899562	3.358951	0.009737	2.469605	0.333616	1053.34	0.042161	0.012889
P-12	Structure Foundation Installation	1.077682	9.804957	11.11509	0.036572	23.51736	2.69636	3934.649	0.136935	0.115091
P-13	Structure Installation	1.354279	12.49595	9.335802	0.030261	16.53449	2.103096	3262.245	0.126528	0.040321
P-14	Conductor Installation	29.34057	54.67454	27.57915	0.275876	32.85083	4.780714	12468.57	0.155879	0.062607
L-15	Access Road Construction	1.670904	16.4129	15.06332	0.035446	17.78685	2.348952	3823.286	0.144503	0.065916
L-16	Structure Foundation Installation	1.316894	11.30316	12.68218	0.042361	23.58046	2.754413	4561.485	0.162362	0.120176
L-17	Structure Installation	1.593491	13.99415	10.90289	0.03605	16.59759	2.16115	3889.081	0.151956	0.045406
L-18	Conductor Installation	15.70453	37.5779	21.11225	0.157174	30.98457	4.235255	8303.113	0.155879	0.062607
P-19	Structure Foundation Installation	0.786656	7.274512	7.064966	0.030994	16.32383	1.878014	3335.237	0.121866	0.070615
P-20	Structure Installation	1.185607	11.38018	8.146131	0.024484	11.81093	1.606038	2637.975	0.102818	0.029163
P-21	Conductor Installation	14.96402	30.2054	14.94194	0.147157	11.63641	1.990314	7236.96	0.119827	0.038789
P-22	Structure Foundation Installation	0.483478	4.640488	4.088668	0.018257	9.117723	1.074045	1963.602	0.068177	0.057647
P-23	Structure Installation	0.851117	8.146702	5.961121	0.017567	6.340375	0.940037	1893.769	0.074023	0.02181
P-24	Conductor Installation	0.368358	3.429823	2.777375	0.009297	6.134624	0.750746	998.0666	0.03769	0.014544
P-25	Structure Foundation Installation	0.483478	4.640488	4.088668	0.018257	9.117723	1.074045	1963.602	0.068177	0.057647
P-26	Structure Installation	0.851117	8.146702	5.961121	0.017567	6.340375	0.940037	1893.769	0.074023	0.02181
P-27	Conductor Installation	0.368358	3.429823	2.777375	0.009297	6.134624	0.750746	998.0666	0.03769	0.014544
P-28	Distribution Extension to Substation	1.902527	18.24037	16.61694	0.047988	13.39287	2.077034	5176.365	0.19032	0.113939
L-29	Fiber Extension to Substation	1.973718	19.37091	17.64556	0.041017	18.81776	2.732655	4421.945	0.160352	0.10543
P-30	Tranquility Outdoor	1.660282	16.30267	14.57102	0.044339	14.35999	2.005699	4783.996	0.180858	0.086545
P-31	Tranquility Indoor	0.567976	6.740188	6.795596	0.01572	9.122387	1.097571	1693.979	0.062526	0.038329
P-32	Panoche Outdoor	1.660282	16.30267	14.57102	0.044339	7.337368	1.305407	4783.996	0.180858	0.086545
P-33	Panoche Indoor	0.567976	6.740188	6.795596	0.01572	3.270199	0.513994	1693.979	0.062526	0.038329
P-36	Substation Modifications	0.567976	6.740188	6.795596	0.01572	3.270199	0.513994	1693.979	0.062526	0.038329
L-37	Commissioning and Testing	0.286258	2.270127	2.521585	0.00739	30.87813	3.21892	778.6176	0.02407	0.023308
L-38	Site & ROW Restoration	1.562658	15.51018	12.65019	0.031363	24.7619	3.005119	3380.264	0.126542	0.058504

Table 42: Total Controlled On-Site Daily Emissions (pounds)

Index	Name	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
L-01	Survey	0.011951	0.018572	0.230421	0.000551	1.528804	0.160903	55.69734	0.001145	0.001503
L-02	Site Development	1.225961	9.080265	30.76986	0.064942	6.027699	0.930239	6900.578	0.264282	0.107719
L-03	Below-Grade Construction	1.991972	16.24885	31.22936	0.06065	10.33808	1.953613	6410.183	0.227577	0.152663
L-04	Above-Grade Construction (Phase 1)	2.037306	16.65602	21.58533	0.038996	6.123758	1.428942	3984.073	0.14985	0.062166
L-39	Above-Grade Construction (Phase 2)	0.455661	4.232228	5.553958	0.011188	2.704572	0.385215	930.4203	0.033557	0.013401
P-05	Structure Foundation Installation	0.752249	5.983613	21.96308	0.048345	6.288392	0.859578	5208.814	0.18862	0.125428
P-06	Structure Installation	0.731879	5.26802	17.8653	0.037763	4.414249	0.65537	4074.591	0.159481	0.046911
P-07	Conductor Installation	14.4901	23.82803	24.78922	0.157174	9.596037	1.624179	8303.113	0.155879	0.062607
P-08	Structure Foundation Installation	0.856576	6.58969	24.67013	0.054135	6.313072	0.882996	5835.649	0.214047	0.130513
P-09	Structure Installation	0.696724	4.978745	17.04919	0.03605	4.402431	0.644286	3889.081	0.151956	0.045406
P-10	Conductor Installation	28.12614	40.92467	31.25612	0.275876	11.4623	2.169638	12468.57	0.155879	0.062607
P-11	Access Construction	0.196471	1.71969	4.929766	0.009737	0.679613	0.12452	1053.34	0.042161	0.012889
P-12	Structure Foundation Installation	0.590742	4.860341	16.5909	0.036572	6.248848	0.821743	3934.649	0.136935	0.115091
P-13	Structure Installation	0.592396	4.372667	14.34214	0.030261	4.377751	0.620868	3262.245	0.126528	0.040321
P-14	Conductor Installation	28.12614	40.92467	31.25612	0.275876	11.4623	2.169638	12468.57	0.155879	0.062607
L-15	Access Road Construction	0.732265	6.223465	18.06697	0.035446	4.785161	0.711451	3823.286	0.144503	0.065916
L-16	Structure Foundation Installation	0.69507	5.466419	19.29795	0.042361	6.273529	0.845161	4561.485	0.162362	0.120176
L-17	Structure Installation	0.696724	4.978745	17.04919	0.03605	4.402431	0.644286	3889.081	0.151956	0.045406
L-18	Conductor Installation	14.4901	23.82803	24.78922	0.157174	9.596037	1.624179	8303.113	0.155879	0.062607
P-19	Structure Foundation Installation	0.449284	3.238831	13.19854	0.030994	4.362363	0.575304	3335.237	0.121866	0.070615
P-20	Structure Installation	0.507991	3.843226	11.8761	0.024484	3.171045	0.485007	2637.975	0.102818	0.029163
P-21	Conductor Installation	14.20118	21.55729	19.64366	0.147157	4.489725	0.986322	7236.96	0.119827	0.038789
P-22	Structure Foundation Installation	0.266864	2.083059	7.423125	0.018257	2.457437	0.3365	1963.602	0.068177	0.057647
P-23	Structure Installation	0.365214	2.768104	8.620398	0.017567	1.732534	0.29487	1893.769	0.074023	0.02181
P-24	Conductor Installation	0.18066	1.256785	4.267032	0.009297	1.668323	0.234775	998.0666	0.03769	0.014544
P-25	Structure Foundation Installation	0.266864	2.083059	7.423125	0.018257	2.457437	0.3365	1963.602	0.068177	0.057647
P-26	Structure Installation	0.365214	2.768104	8.620398	0.017567	1.732534	0.29487	1893.769	0.074023	0.02181
P-27	Conductor Installation	0.18066	1.256785	4.267032	0.009297	1.668323	0.234775	998.0666	0.03769	0.014544
P-28	Distribution Extension to Substation	1.137242	9.666357	23.32643	0.047988	3.850212	0.845477	5176.365	0.19032	0.113939
L-29	Fiber Extension to Substation	1.372009	12.62866	21.39299	0.041017	5.398167	1.165465	4421.945	0.160352	0.10543
P-30	Tranquility Outdoor	0.994642	9.125829	21.17544	0.044339	4.011437	0.750751	4783.996	0.180858	0.086545
P-31	Tranquility Indoor	0.351796	4.379828	7.959398	0.01572	2.452034	0.34983	1693.979	0.062526	0.038329
P-32	Panoche Outdoor	0.994642	9.125829	21.17544	0.044339	2.24411	0.574871	4783.996	0.180858	0.086545
P-33	Panoche Indoor	0.351796	4.379828	7.959398	0.01572	0.979262	0.203263	1693.979	0.062526	0.038329
P-36	Substation Modifications	0.351796	4.379828	7.959398	0.01572	0.979262	0.203263	1693.979	0.062526	0.038329
L-37	Commissioning and Testing	0.166437	0.921156	3.190765	0.00739	8.048559	0.89487	778.6176	0.02407	0.023308
L-38	Site & ROW Restoration	1.562658	15.51018	12.65019	0.031363	6.920784	1.222152	3380.264	0.126542	0.058504

Table 43: Total Uncontrolled Annual Emissions (tons)

Index	Name	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
L-01	Survey	0.001524	0.002368	0.029379	7.02E-05	0.753298	0.076234	7.10141	0.000146	0.000192
L-02	Site Development	0.105683	0.878831	0.960841	0.00326	3.888981	0.425391	344.4296	0.011001	0.012624
L-03	Below-Grade Construction	0.203826	1.678991	2.219625	0.006578	11.22267	1.22377	689.3734	0.017662	0.037552
L-04	Above-Grade Construction (Phase 1)	0.340866	2.771207	2.709352	0.006516	11.03178	1.255402	666.4839	0.020449	0.02212
L-39	Above-Grade Construction (Phase 2)	0.016882	0.120646	0.232941	0.000506	1.266757	0.133207	45.97608	0.001321	0.001134
P-05	Structure Foundation Installation	0.031071	0.293384	0.332901	0.001383	2.152269	0.228174	147.4501	0.003884	0.008889
P-06	Structure Installation	0.024608	0.202765	0.192587	0.000618	1.050029	0.113966	66.01419	0.002301	0.001436
P-07	Conductor Installation	0.16128	0.283985	0.38513	0.001771	1.440562	0.158649	103.4557	0.001909	0.001953
P-08	Structure Foundation Installation	0.026862	0.242995	0.273864	0.001128	1.629628	0.173485	120.3595	0.003295	0.006798
P-09	Structure Installation	0.020758	0.169217	0.164366	0.000527	0.92845	0.100428	56.2638	0.001949	0.001253
P-10	Conductor Installation	0.565517	0.662442	1.056584	0.005621	2.772526	0.311797	275.7096	0.003627	0.003711
P-11	Access Construction	0.004827	0.039944	0.046473	0.000135	0.14983	0.016692	14.61995	0.000558	0.00039
P-12	Structure Foundation Installation	0.035629	0.338055	0.393251	0.001606	2.964463	0.312506	170.7508	0.004036	0.011989
P-13	Structure Installation	0.020356	0.171812	0.165433	0.000521	1.048732	0.112772	55.45369	0.001872	0.00135
P-14	Conductor Installation	1.651906	1.935029	3.086336	0.016418	8.098694	0.910777	805.3624	0.010594	0.010841
L-15	Access Road Construction	0.027159	0.259577	0.262471	0.000712	1.221662	0.132819	76.03813	0.002317	0.003147
L-16	Structure Foundation Installation	0.038456	0.346748	0.399234	0.001616	2.733439	0.28936	172.0892	0.004317	0.011169
L-17	Structure Installation	0.031589	0.257504	0.250123	0.000802	1.412858	0.152825	85.61882	0.002965	0.001907
L-18	Conductor Installation	0.483841	0.851955	1.155391	0.005314	4.321685	0.475948	310.3671	0.005726	0.00586
P-19	Structure Foundation Installation	0.012951	0.114248	0.13683	0.000604	1.008358	0.106446	64.17122	0.001764	0.003243
P-20	Structure Installation	0.009059	0.077464	0.074753	0.000213	0.3716	0.040922	22.60893	0.000781	0.000436
P-21	Conductor Installation	0.098255	0.131383	0.180705	0.001005	0.315811	0.037762	51.98381	0.000855	0.000653
P-22	Structure Foundation Installation	0.00422	0.041443	0.041321	0.000206	0.292369	0.031266	21.91918	0.000516	0.001534
P-23	Structure Installation	0.003498	0.030069	0.028572	8.08E-05	0.106227	0.0121	8.594613	0.0003	0.000183
P-24	Conductor Installation	0.00155	0.011623	0.014939	4.44E-05	0.090435	0.009803	4.679703	0.000148	0.000135
P-25	Structure Foundation Installation	0.003895	0.038255	0.038143	0.00019	0.269879	0.028861	20.23309	0.000476	0.001416
P-26	Structure Installation	0.011993	0.103095	0.09796	0.000277	0.364208	0.041485	29.46724	0.001028	0.000626
P-27	Conductor Installation	0.005942	0.044555	0.057265	0.00017	0.346667	0.03758	17.93886	0.000567	0.000516
P-28	Distribution Extension to Substation	0.02769	0.275052	0.257892	0.000911	0.82706	0.095009	97.38788	0.002673	0.005466
L-29	Fiber Extension to Substation	0.056861	0.566756	0.539121	0.001607	2.300595	0.257637	171.403	0.004528	0.010259
P-30	Tranquility Outdoor	0.190737	1.827121	1.775581	0.00608	6.929623	0.772505	649.9604	0.019764	0.029139
P-31	Tranquility Indoor	0.05394	0.576576	0.628166	0.001768	3.322284	0.357342	188.4564	0.005355	0.010626
P-32	Panoche Outdoor	0.190737	1.827121	1.775581	0.00608	3.41831	0.422359	649.9604	0.019764	0.029139
P-33	Panoche Indoor	0.054669	0.584368	0.636654	0.001792	1.172609	0.14333	191.0031	0.005427	0.010769
P-36	Substation Modifications	0.028063	0.299975	0.326816	0.00092	0.601939	0.073576	98.04825	0.002786	0.005528
L-37	Commissioning and Testing	0.062609	0.329173	0.778681	0.002116	15.25162	1.562958	218.456	0.005142	0.010183
L-38	Site & ROW Restoration	0.121519	1.17182	1.105321	0.003153	8.349381	0.880451	335.7289	0.009917	0.013602

Table 44: Total Controlled Annual Emissions (tons)

Index	Name	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
L-01	Survey	0.001524	0.002368	0.029379	7.02E-05	0.194923	0.020515	7.10141	0.000146	0.000192
L-02	Site Development	0.059495	0.432773	1.357327	0.00326	1.041148	0.127766	344.4296	0.011001	0.012624
L-03	Below-Grade Construction	0.166592	1.306664	2.633101	0.006578	3.039671	0.395969	689.3734	0.017662	0.037552
L-04	Above-Grade Construction (Phase 1)	0.272973	2.024829	3.123331	0.006516	3.029673	0.431307	666.4839	0.020449	0.02212
L-39	Above-Grade Construction (Phase 2)	0.016882	0.120646	0.232941	0.000506	0.341606	0.040888	45.97608	0.001321	0.001134
P-05	Structure Foundation Installation	0.019828	0.174561	0.485987	0.001383	0.568053	0.066618	147.4501	0.003884	0.008889
P-06	Structure Installation	0.012265	0.077849	0.276317	0.000618	0.276299	0.032595	66.01419	0.002301	0.001436
P-07	Conductor Installation	0.149136	0.146486	0.4219	0.001771	0.394587	0.049507	103.4557	0.001909	0.001953
P-08	Structure Foundation Installation	0.016466	0.140585	0.405673	0.001128	0.430224	0.050742	120.3595	0.003295	0.006798
P-09	Structure Installation	0.010445	0.06554	0.235049	0.000527	0.244282	0.028707	56.2638	0.001949	0.001253
P-10	Conductor Installation	0.542443	0.401195	1.126446	0.005621	0.785174	0.104426	275.7096	0.003627	0.003711
P-11	Access Construction	0.003115	0.025196	0.066108	0.000135	0.039867	0.005338	14.61995	0.000558	0.00039
P-12	Structure Foundation Installation	0.023213	0.211967	0.532884	0.001606	0.781984	0.09086	170.7508	0.004036	0.011989
P-13	Structure Installation	0.010452	0.066209	0.230516	0.000521	0.275824	0.032147	55.45369	0.001872	0.00135
P-14	Conductor Installation	1.584505	1.171911	3.290408	0.016418	2.293536	0.305034	805.3624	0.010594	0.010841
L-15	Access Road Construction	0.013549	0.11183	0.306024	0.000712	0.32192	0.038104	76.03813	0.002317	0.003147
L-16	Structure Foundation Installation	0.023844	0.209585	0.554705	0.001616	0.721232	0.084284	172.0892	0.004317	0.011169
L-17	Structure Installation	0.015895	0.099734	0.357683	0.000802	0.371734	0.043684	85.61882	0.002965	0.001907
L-18	Conductor Installation	0.447408	0.439459	1.2657	0.005314	1.183761	0.14852	310.3671	0.005726	0.00586
P-19	Structure Foundation Installation	0.008734	0.063802	0.213499	0.000604	0.267619	0.031165	64.17122	0.001764	0.003243
P-20	Structure Installation	0.004654	0.028474	0.098998	0.000213	0.099098	0.012047	22.60893	0.000781	0.000436
P-21	Conductor Installation	0.093297	0.07517	0.211266	0.001005	0.092867	0.013624	51.98381	0.000855	0.000653
P-22	Structure Foundation Installation	0.002812	0.02482	0.062995	0.000206	0.07828	0.009429	21.91918	0.000516	0.001534
P-23	Structure Installation	0.001797	0.011244	0.037879	8.08E-05	0.028788	0.003724	8.594613	0.0003	0.000183
P-24	Conductor Installation	0.000987	0.005104	0.019408	4.44E-05	0.024483	0.003011	4.679703	0.000148	0.000135
P-25	Structure Foundation Installation	0.002596	0.02291	0.05815	0.00019	0.072258	0.008703	20.23309	0.000476	0.001416
P-26	Structure Installation	0.006162	0.038552	0.129871	0.000277	0.098702	0.012766	29.46724	0.001028	0.000626
P-27	Conductor Installation	0.003783	0.019565	0.074396	0.00017	0.093851	0.011543	17.93886	0.000567	0.000516
P-28	Distribution Extension to Substation	0.017741	0.16359	0.345115	0.000911	0.224773	0.031277	97.38788	0.002673	0.005466
L-29	Fiber Extension to Substation	0.041517	0.394828	0.634681	0.001607	0.618294	0.083949	171.403	0.004528	0.010259
P-30	Tranquility Outdoor	0.124173	1.109437	2.436022	0.00608	1.865704	0.244961	649.9604	0.019764	0.029139
P-31	Tranquility Indoor	0.037943	0.401909	0.714287	0.001768	0.884217	0.107977	188.4564	0.005355	0.010626
P-32	Panoche Outdoor	0.124173	1.109437	2.436022	0.00608	0.982041	0.157021	649.9604	0.019764	0.029139
P-33	Panoche Indoor	0.038455	0.407341	0.72394	0.001792	0.343876	0.054473	191.0031	0.005427	0.010769
P-36	Substation Modifications	0.01974	0.209102	0.371622	0.00092	0.176523	0.027963	98.04825	0.002786	0.005528
L-37	Commissioning and Testing	0.050746	0.195625	0.84493	0.002116	3.9734	0.432985	218.456	0.005142	0.010183
L-38	Site & ROW Restoration	0.05892	0.49112	1.280871	0.003153	2.167962	0.241026	335.7289	0.009917	0.013602

Table 45: Activity Distribution by Year and District

Type	Count	Index	Name	Start Date	End Date	Schedule Days	Pct 2026	Pct 2027	Pct 2028
LSPGC	1	L-01	Survey	4/1/2026	5/31/2026	51	1.00	0.00	0.00
LSPGC	2	L-02	Site Development	5/1/2026	8/1/2026	76	1.00	0.00	0.00
LSPGC	3	L-03	Below-Grade Construction	6/1/2026	10/31/2026	127	1.00	0.00	0.00
LSPGC	4	L-04	Above-Grade Construction (Phase 1)	11/1/2026	7/31/2027	224	0.21	0.79	0.00
LSPGC	39	L-39	Above-Grade Construction (Phase 2)	8/1/2027	10/1/2027	52	0.00	1.00	0.00
PG&E	5	P-05	Structure Foundation Installation	6/1/2027	7/15/2027	37	0.00	1.00	0.00
PG&E	6	P-06	Structure Installation	7/16/2027	8/15/2027	26	0.00	1.00	0.00
PG&E	7	P-07	Conductor Installation	8/16/2027	9/8/2027	20	0.00	1.00	0.00
PG&E	8	P-08	Structure Foundation Installation	6/1/2027	7/3/2027	28	0.00	1.00	0.00
PG&E	9	P-09	Structure Installation	7/4/2027	8/1/2027	23	0.00	1.00	0.00
PG&E	10	P-10	Conductor Installation	8/2/2027	9/15/2027	38	0.00	1.00	0.00
PG&E	11	P-11	Access Construction	5/1/2026	5/31/2026	25	1.00	0.00	0.00
PG&E	12	P-12	Structure Foundation Installation	6/1/2026	8/1/2026	51	1.00	0.00	0.00
PG&E	13	P-13	Structure Installation	10/1/2026	11/1/2026	26	1.00	0.00	0.00
PG&E	14	P-14	Conductor Installation	11/15/2026	3/31/2027	111	0.33	0.67	0.00
LSPGC	15	L-15	Access Road Construction	5/1/2027	6/4/2027	29	0.00	1.00	0.00
LSPGC	16	L-16	Structure Foundation Installation	6/5/2027	8/1/2027	47	0.00	1.00	0.00
LSPGC	17	L-17	Structure Installation	8/2/2027	9/11/2027	35	0.00	1.00	0.00
LSPGC	18	L-18	Conductor Installation	9/16/2027	11/29/2027	60	0.00	1.00	0.00
PG&E	19	P-19	Structure Foundation Installation	5/1/2026	5/31/2026	25	1.00	0.00	0.00
PG&E	20	P-20	Structure Installation	6/1/2026	6/15/2026	13	1.00	0.00	0.00
PG&E	21	P-21	Conductor Installation	6/16/2026	7/1/2026	13	1.00	0.00	0.00
PG&E	22	P-22	Structure Foundation Installation	5/1/2026	5/15/2026	13	1.00	0.00	0.00
PG&E	23	P-23	Structure Installation	6/1/2026	6/8/2026	7	1.00	0.00	0.00
PG&E	24	P-24	Conductor Installation	6/9/2026	6/15/2026	6	1.00	0.00	0.00
PG&E	25	P-25	Structure Foundation Installation	5/16/2026	5/31/2026	12	1.00	0.00	0.00
PG&E	26	P-26	Structure Installation	1/1/2027	1/31/2027	24	0.00	1.00	0.00
PG&E	27	P-27	Conductor Installation	2/1/2027	2/28/2027	23	0.00	1.00	0.00
PG&E	28	P-28	Distribution Extension to Substation	6/1/2026	7/1/2026	26	1.00	0.00	0.00
LSPGC	29	L-29	Fiber Extension to Substation	6/1/2027	8/1/2027	51	0.00	1.00	0.00
PG&E	30	P-30	Tranquility Outdoor	5/1/2026	12/31/2026	200	1.00	0.00	0.00
PG&E	31	P-31	Tranquility Indoor	11/1/2026	4/30/2027	148	0.32	0.68	0.00
PG&E	32	P-32	Panoche Outdoor	5/1/2026	12/31/2026	200	1.00	0.00	0.00
PG&E	33	P-33	Panoche Indoor	7/1/2026	12/31/2026	150	1.00	0.00	0.00
PG&E	36	P-36	Substation Modifications	2/1/2027	5/1/2027	77	0.00	1.00	0.00
LSPGC	37	L-37	Commissioning and Testing	10/2/2027	6/1/2028	198	0.00	0.36	0.64
LSPGC	38	L-38	Site & ROW Restoration	2/1/2028	7/17/2028	140	0.00	0.00	1.00

Table 46: Annual Emissions (tons/year)

District	Type	Year	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O	CO2e	CO2e Metric Tons
SJVAPCD	Unctrl	2026	1.6	9.5	10.6	0.0	41.0	4.6	3536.6	0.1	0.2	3586.1	3253.298
SJVAPCD	Unctrl	2027	3.0	8.7	10.6	0.0	46.3	5.1	3042.4	0.1	0.1	3073.9	2788.606
SJVAPCD	Unctrl	2028	0.2	1.4	1.6	0.0	18.1	1.9	475.8	0.0	0.0	482.2	437.426
SJVAPCD	Ctrl	2026	1.3	6.0	13.5	0.0	11.2	1.5	3536.6	0.1	0.2	3586.1	3253.298
SJVAPCD	Ctrl	2027	2.7	5.4	12.3	0.0	12.6	1.6	3042.4	0.1	0.1	3073.9	2788.606
SJVAPCD	Ctrl	2028	0.1	0.6	1.8	0.0	4.7	0.5	475.8	0.0	0.0	482.2	437.426

Table 47: GHG Emissions Summary (metric tons)

Type	Phase	CO2	CH4	N2O	SF6	CO2e
Uncontrolled	Construction	6400.11	0.16	0.25	0.00	6479.33
Uncontrolled	O&M	2.37	0.00	0.00	0.00	2.49
Uncontrolled	Electricity	35.66	0.01	0.00	0.00	36.01
Uncontrolled	SF6 Loss	0.00	0.00	0.00	0.12	2834.77
Uncontrolled	Combined	251.37	0.01	0.01	0.12	3089.24
Controlled	Construction	6400.11	0.16	0.25	0.00	6479.33
Controlled	O&M	2.37	0.00	0.00	0.00	2.49
Controlled	Electricity	35.66	0.01	0.00	0.00	36.01
Controlled	SF6 Loss	0.00	0.00	0.00	0.12	2834.77
Controlled	Combined	251.37	0.01	0.01	0.12	3089.24

Table 48: Monthly Uncontrolled Emissions (tons)

Pollutant	4/1/2026	5/1/2026	6/1/2026	7/1/2026	8/1/2026	9/1/2026	10/1/2026	11/1/2026	12/1/2026	1/1/2027	2/1/2027	3/1/2027	4/1/2027	5/1/2027	6/1/2027	7/1/2027	8/1/2027	9/1/2027	10/1/2027	11/1/2027	12/1/2027	1/1/2028	2/1/2028	3/1/2028	4/1/2028	5/1/2028	6/1/2028	7/1/2028	8/1/2028
ROG	0.001	0.109	0.271	0.158	0.103	0.097	0.121	0.255	0.495	0.414	0.400	0.463	0.059	0.062	0.132	0.137	0.543	0.348	0.210	0.185	0.008	0.008	0.028	0.032	0.030	0.031	0.022	0.011	0.000
NOX	0.001	0.981	1.811	1.365	0.938	0.885	1.092	1.154	1.729	1.167	1.154	1.302	0.524	0.537	1.193	1.202	1.348	0.832	0.530	0.468	0.040	0.040	0.241	0.271	0.251	0.261	0.211	0.109	0.000
CO	0.015	1.037	1.859	1.514	1.047	0.987	1.192	1.032	1.443	0.902	0.936	1.019	0.535	0.533	1.251	1.216	1.093	0.647	0.447	0.397	0.094	0.094	0.284	0.319	0.296	0.308	0.201	0.103	0.000
SO2	0.000	0.004	0.007	0.005	0.003	0.003	0.004	0.004	0.007	0.005	0.005	0.005	0.001	0.001	0.004	0.004	0.006	0.004	0.002	0.002	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000
PM10	0.384	4.662	7.890	6.487	3.955	3.698	4.895	3.690	5.310	3.836	3.854	4.117	2.067	2.292	6.658	6.332	5.073	3.216	3.674	3.356	1.849	1.849	3.280	3.690	3.417	3.553	1.568	0.775	0.000
PM2.5	0.039	0.510	0.872	0.714	0.442	0.414	0.543	0.419	0.602	0.431	0.433	0.464	0.233	0.256	0.723	0.692	0.557	0.353	0.390	0.356	0.189	0.189	0.340	0.383	0.355	0.369	0.165	0.082	0.000
CO2	3.620	400.214	672.705	534.772	351.108	330.027	398.682	344.288	501.207	305.569	311.824	344.995	143.574	141.208	452.877	412.467	378.121	229.469	156.683	139.177	26.480	26.480	84.033	94.537	87.534	91.036	61.055	31.175	0.000
CH4	0.000	0.012	0.019	0.015	0.010	0.009	0.012	0.009	0.012	0.006	0.007	0.007	0.004	0.004	0.012	0.012	0.008	0.004	0.003	0.003	0.001	0.001	0.002	0.003	0.002	0.003	0.002	0.001	0.000

Table 49: Monthly Controlled Emissions (tons)

Pollutant	4/1/2026	5/1/2026	6/1/2026	7/1/2026	8/1/2026	9/1/2026	10/1/2026	11/1/2026	12/1/2026	1/1/2027	2/1/2027	3/1/2027	4/1/2027	5/1/2027	6/1/2027	7/1/2027	8/1/2027	9/1/2027	10/1/2027	11/1/2027	12/1/2027	1/1/2028	2/1/2028	3/1/2028	4/1/2028	5/1/2028	6/1/2028	7/1/2028	8/1/2028
ROG	0.001	0.089	0.205	0.109	0.074	0.070	0.084	0.222	0.448	0.384	0.372	0.432	0.045	0.042	0.091	0.091	0.501	0.325	0.193	0.170	0.005	0.005	0.027	0.030	0.028	0.029	0.021	0.011	0.000
NOX	0.001	0.558	1.116	0.866	0.636	0.602	0.693	0.795	1.216	0.829	0.840	0.963	0.376	0.325	0.772	0.731	0.898	0.578	0.342	0.301	0.024	0.024	0.225	0.253	0.234	0.243	0.210	0.109	0.000
CO	0.015	1.471	2.454	1.980	1.326	1.248	1.528	1.264	1.741	1.037	1.054	1.150	0.613	0.617	1.640	1.578	1.225	0.732	0.501	0.445	0.102	0.102	0.292	0.328	0.304	0.316	0.202	0.103	0.000
SO2	0.000	0.004	0.007	0.005	0.003	0.003	0.004	0.004	0.007	0.005	0.005	0.005	0.001	0.001	0.004	0.004	0.006	0.004	0.002	0.002	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000
PM10	0.099	1.252	2.134	1.753	1.081	1.012	1.328	1.020	1.474	1.063	1.070	1.146	0.567	0.618	1.776	1.689	1.388	0.883	0.981	0.896	0.482	0.482	0.858	0.965	0.894	0.930	0.412	0.204	0.000
PM2.5	0.010	0.157	0.276	0.226	0.146	0.137	0.175	0.141	0.202	0.142	0.144	0.156	0.078	0.081	0.223	0.213	0.174	0.111	0.115	0.105	0.052	0.052	0.098	0.110	0.102	0.106	0.050	0.025	0.000
CO2	3.620	400.214	672.705	534.772	351.108	330.027	398.682	344.288	501.207	305.569	311.824	344.995	143.574	141.208	452.877	412.467	378.121	229.469	156.683	139.177	26.480	26.480	84.033	94.537	87.534	91.036	61.055	31.175	0.000
CH4	0.000	0.012	0.019	0.015	0.010	0.009	0.012	0.009	0.012	0.006	0.007	0.007	0.004	0.004	0.012	0.012	0.008	0.004	0.003	0.003	0.001	0.001	0.002	0.003	0.002	0.003	0.002	0.001	0.000

Table 50: 12-Month Rolling Uncontrolled Emissions (tons)

Pollutant	Rolling Group 1	Rolling Group 2	Rolling Group 3	Rolling Group 4	Rolling Group 5	Rolling Group 6	Rolling Group 7	Rolling Group 8	Rolling Group 9	Rolling Group 10	Rolling Group 11	Rolling Group 12	Rolling Group 13	Rolling Group 14	Rolling Group 15	Rolling Group 16	Rolling Group 17	Maximum
ROG	2.887	2.945	2.898	2.738	2.737	3.177	3.428	3.517	3.446	2.959	2.552	2.180	1.750	1.721	1.690	1.580	1.455	3.517
NOX	13.579	14.102	13.658	13.041	12.877	13.287	13.234	12.672	11.985	10.296	9.169	8.256	7.225	6.952	6.676	5.693	4.600	14.102
CO	12.974	13.494	12.990	12.382	12.083	12.069	11.730	10.985	10.350	9.001	8.193	7.551	6.851	6.612	6.386	5.337	4.224	13.494
SO2	0.052	0.053	0.051	0.048	0.047	0.050	0.049	0.048	0.041	0.036	0.032	0.028	0.027	0.027	0.027	0.023	0.020	0.053
PM10	52.778	54.461	52.091	50.859	50.704	51.821	51.340	50.119	49.785	46.324	44.337	43.763	43.336	44.686	45.947	40.857	35.300	54.461
PM2.5	5.884	6.078	5.824	5.674	5.652	5.767	5.705	5.552	5.489	5.076	4.835	4.743	4.662	4.783	4.896	4.338	3.728	6.078
CO2	4499.012	4638.966	4379.960	4160.132	4037.827	4064.840	3964.281	3722.283	3517.172	3042.445	2763.355	2535.564	2285.106	2229.067	2178.895	1787.073	1405.780	4638.966
CH4	0.117	0.121	0.114	0.108	0.104	0.102	0.097	0.089	0.082	0.071	0.065	0.061	0.057	0.055	0.053	0.043	0.032	0.121

Table 51: 12-Month Rolling Controlled Emissions (tons)

Pollutant	Rolling Group 1	Rolling Group 2	Rolling Group 3	Rolling Group 4	Rolling Group 5	Rolling Group 6	Rolling Group 7	Rolling Group 8	Rolling Group 9	Rolling Group 10	Rolling Group 11	Rolling Group 12	Rolling Group 13	Rolling Group 14	Rolling Group 15	Rolling Group 16	Rolling Group 17	Maximum
ROG	2.471	2.515	2.489	2.375	2.357	2.784	3.039	3.149	3.096	2.654	2.276	1.931	1.529	1.512	1.499	1.430	1.350	3.149
NOX	9.115	9.490	9.258	8.914	8.779	9.041	9.016	8.666	8.171	6.979	6.174	5.559	4.848	4.706	4.624	4.063	3.440	9.490
CO	16.270	16.868	16.015	15.201	14.799	14.697	14.181	13.154	12.335	10.697	9.762	9.000	8.178	7.868	7.567	6.129	4.653	16.868
SO2	0.052	0.053	0.051	0.048	0.047	0.050	0.051	0.049	0.048	0.041	0.036	0.032	0.028	0.027	0.027	0.023	0.020	0.053
PM10	14.433	14.900	14.266	13.907	13.843	14.150	14.021	13.675	13.550	12.558	11.977	11.765	11.584	11.911	12.222	10.859	9.373	14.900
PM2.5	1.913	1.981	1.906	1.852	1.839	1.867	1.840	1.781	1.744	1.595	1.505	1.459	1.413	1.437	1.462	1.289	1.101	1.981
CO2	4499.012	4638.966	4379.960	4160.132	4037.827	4064.840	3964.281	3722.283	3517.172	3042.445	2763.355	2535.564	2285.106	2229.067	2178.895	1787.073	1405.780	4638.966
CH4	0.117	0.121	0.114	0.108	0.104	0.102	0.097	0.089	0.082	0.071	0.065	0.061	0.057	0.055	0.053	0.043	0.032	0.121

Table 52: Daily Controlled On-Site Emissions (pounds)

Group 1
Table with 13 columns for dates (4/1/2026 to 5/13/2026) and 7 rows for pollutants (ROG, NOX, CO, SO2, PM10, PM2.5). Values range from 0 to 1.24.

Table 53: Daily Controlled On-Site Emissions (pounds)

Group 2
Table with 13 columns for dates (4/1/2026 to 5/13/2026) and 7 rows for pollutants (ROG, NOX, CO, SO2, PM10, PM2.5). Values are consistently 0.

Table 54: Daily Controlled On-Site Emissions (pounds)

Group 3
Table with 13 columns for dates (4/1/2026 to 5/13/2026) and 7 rows for pollutants (ROG, NOX, CO, SO2, PM10, PM2.5). Values range from 0 to 0.34.

Table 55: Daily Controlled On-Site Emissions (pounds)

Group 4
Table with 13 columns for dates (4/1/2026 to 5/13/2026) and 7 rows for pollutants (ROG, NOX, CO, SO2, PM10, PM2.5). Values range from 0 to 1.26.

Table 56: Daily Controlled On-Site Emissions (pounds)

Group 5
Table with 13 columns for dates (4/1/2026 to 5/13/2026) and 7 rows for pollutants (ROG, NOX, CO, SO2, PM10, PM2.5). Values range from 0 to 0.97.

Table 52:
Group 1

Table with 29 columns (Pollutant, dates 7/18/2027-8/29/2027) and 6 rows (ROG, NOX, CO, SO2, PM10, PM2.5). Values are consistent across all dates for each pollutant.

Table 53:
Group 2

Table with 29 columns (Pollutant, dates 7/18/2027-8/29/2027) and 6 rows (ROG, NOX, CO, SO2, PM10, PM2.5). Values are consistent across all dates for each pollutant.

Table 54:
Group 3

Table with 29 columns (Pollutant, dates 7/18/2027-8/29/2027) and 6 rows (ROG, NOX, CO, SO2, PM10, PM2.5). Values are consistent across all dates for each pollutant.

Table 55:
Group 4

Table with 29 columns (Pollutant, dates 7/18/2027-8/29/2027) and 6 rows (ROG, NOX, CO, SO2, PM10, PM2.5). Values are consistent across all dates for each pollutant.

Table 56:
Group 5

Table with 29 columns (Pollutant, dates 7/18/2027-8/29/2027) and 6 rows (ROG, NOX, CO, SO2, PM10, PM2.5). Values are all 0 across all dates for each pollutant.

September 20, 2024

VIA EMAIL

Tommy Alexander
California Environmental Quality Act Project Manager
California Public Utilities Commission Energy Division
505 Van Ness Avenue
San Francisco, California 94201

RE: Supplemental Response to the California Public Utilities Commission's (CPUC's) Data Request 1 for the LS Power Grid California, LLC (LSPGC) Manning 500/230 kV Substation Project (Application 24-06-017)

Dear Mr. Alexander,

Only July 24, 2024, the CPUC's Energy Division requested additional information to inform the environmental review of LSPGC's Manning 500/230 kV Substation Project (Application 24-06-017). On August 7, 2024, LSPGC provided a response that included initial information to address Data Request 1. This supplemental response addresses the remaining information request (e.g., the Health Risk Assessment) and concludes our response to Data Request 1.

Should you have any questions or need any additional information, please do not hesitate to contact me at (925) 808-0291.

Sincerely,



Dustin Joseph
Director of Environmental Permitting

Enclosures:

Manning 500/230 kV Substation Project – County of Fresno, CA – Health Risk Assessment Screening Letter

cc: Clayton Eversen (LSPGC)
James Schuchard (LSPGC)
Margaret Bratcher (LSPGC)
Doug Mulvey (LSPGC)
David Wilson (LSPGC)
Kari Zajac (Ascent)
Heather Blair (Ascent)

Ldn Consulting, Inc.

23811 Washington Ave, C110-333, Murrieta, CA 92562

phone 760-473-1253

September 17, 2024

LS Power Grid California
Dustin Joseph
16150 Main Circle Drive, Suite 310
Chesterfield, MO 63017

RE: Manning 500/230 kV Substation Project - County of Fresno, CA - Health Risk Screening Letter

The purpose of this Air Quality Health Risk screening letter is to identify potential health risks from toxic air contaminants (TACs) which would be expected during construction of the Manning 500/230 Kilovolt (kV) Substation Project (Project). The Project seeks to construct an approximately 11-acre 500/230 kV substation (Manning Substation) with an additional disturbance of up to 29 acres for grading disturbance, installation of transmission lines roads and ancillary facilities. Equipment will be stored along the transmission line alignment proposed in this Project. TACs during operations would not be expected since, after the substation is operational, minimal site visits to the substation would be required.

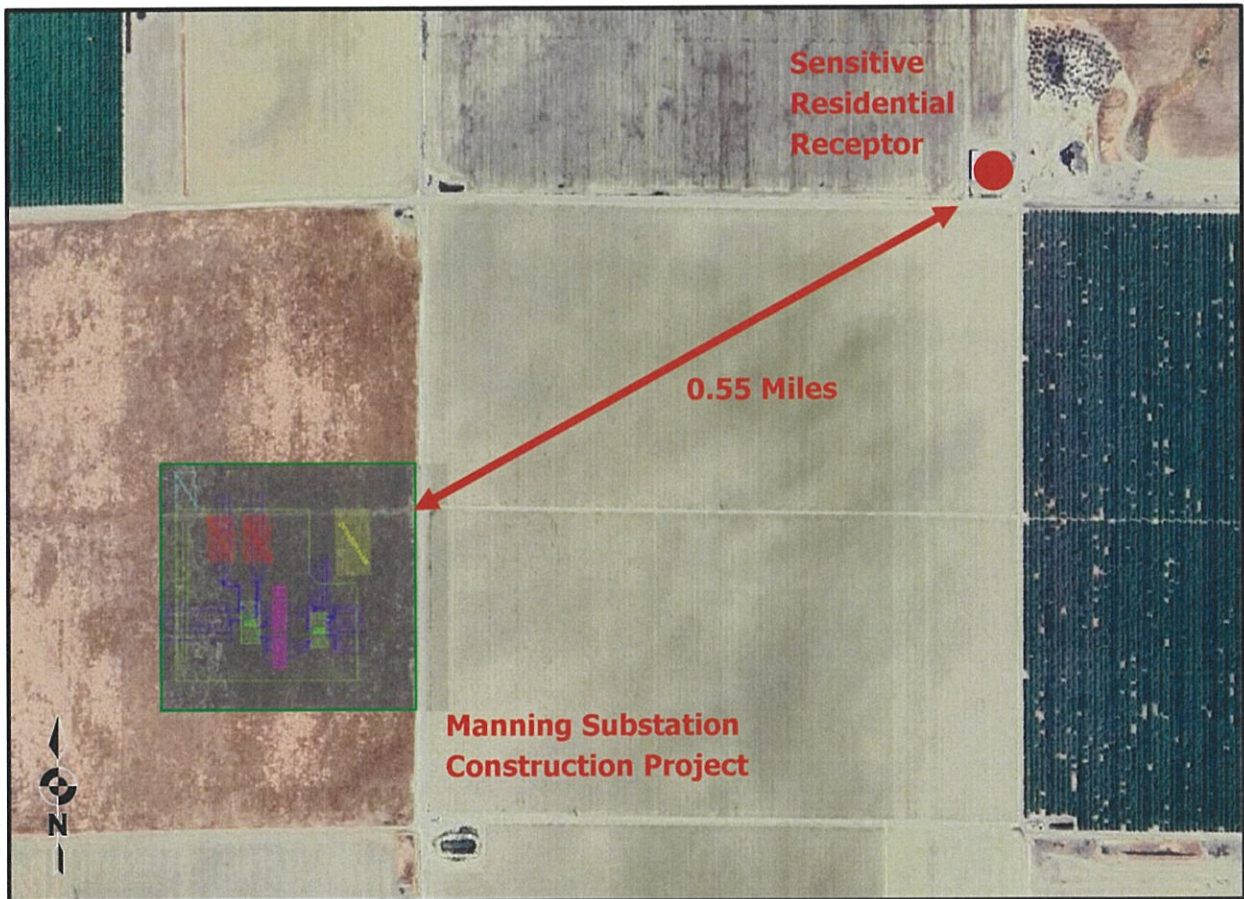
Compliance with San Joaquin Valley Air Pollution Control District (SJVAPCD) health risk thresholds were evaluated per Guidance for Assessing and Mitigating Air Quality Impacts. These are broken out into Carcinogens and Non-Carcinogens (Acute and Chronic). A project cannot increase the cancer risk to greater than 20 for the Maximally Exposed Individual (MEI). For both Acute and Chronic Non-Carcinogens, a project cannot increase the Hazard Index to greater than 1 for the MEI (SJVAPCD, 2015).

Based on the construction area for the Manning Substation, a residential receptor is located approximately 0.5 miles away from the proposed primary substation construction activities. Figure 1 on the following page shows the relative location and distance of the nearest residential receptor from the substation construction area.

Given the linear nature of transmission line work, sensitive receptors near the Project would not experience a noticeable increase in emissions due to construction of the transmission lines, unlike fixed construction areas which have longer exposure times and present a worst-case scenario for project-related human health impacts. Inhalation cancer risks are typically associated with stationary sources emitting over long periods, as noted by the California Office

of Environmental Health Hazard Assessment (OEHHA), making short-term air quality impacts from transmission line work less concerning in comparison to those from fixed construction sites (OEHHA, 2001). Given this, health risks from the transmission lines would be less than significant and are not analyzed further herein. In addition, the project would have a number of staging areas which will be utilized to store construction materials and equipment. These areas would not generate high levels of DPM since equipment operated onsite would not be under any significant load like on an active construction area and would not generate significant levels of TACs to create health risk impacts. Given this equipment used or transported to the staging areas would have a less than significant health risk impact.

Figure 1: Project Layout and Distance to the nearest Sensitive Receptor



Project Construction Emissions

The primary health risks from TACs related to construction at the Manning Substation would be from diesel particulate matter (DPM) emitted from construction equipment emitted over roughly 479 active construction days or 518-calendar days. DPM emissions from this work were provided in Table 17 of Attachment 5.3-A to the PEA (denoted as L-02, L-03, L-04 and L-39). Also, it should be noted that transmission line work will extend from the southeast corner of the Project and traverse east from the project site. These activities will involve quick transitory movements with equipment operating in a linear fashion over short durations relative to any specific location including any residential receptors along the alignment. Construction activities at the Manning Substation, along with the equipment list as analyzed with the Air Quality analysis, are shown in Table 1 below.

Table 1: Manning Substation Construction Activities.

Equipment Identification	Estimated Start	Estimated Completion	Quantity	HP
Site Development (INDEX L-02 – 76 Construction Days)	5/1/2026	8/1/2026		
Truck - Water 4 K			2	300
Loader - 4-5 Yd			2	230
Truck - Dump 10-12 Yd			2	415
Motor Grader			2	250
Scraper			2	410
Vibratory Roller			1	157
Pickup - 1/2 Ton			4	395
Generator – 25 Kw			1	36
Forklift - 15,000 lb.			1	130
Pickup - 1 Ton			4	410
Semi Truck			1	500
844 Loader			1	417
Below Grade Construction (INDEX L-03 – 127 Construction Days)	6/1/2026	10/31/2026		
Truck - Water 4 K			2	300
Excavator			2	108
Forklift - 15 K Reach			1	130
Backhoe - 2X4			2	68
Pickup - 1/2 Ton			4	395
Pickup - 1 Ton			4	410

Equipment Identification	Estimated Start	Estimated Completion	Quantity	HP
Excavator - Mini			1	70
Generator – 25 Kw			1	36
Truck - Concrete			4	425
Loader - 4-5 Yd			2	230
Pressure Digger - Lo-Drill (Tracked)			1	275
Truck - Dump 10-12 Yd			3	415
Trencher			2	75
Skid steer loader			2	74
Wire Trailer/ Tensioner			1	175
Wire Puller			1	175
Above Grade Construction (Phase 1) (INDEX L-04– 224 Construction Days)	11/1/2026	7/31/2027		
Wire Trailer/ Tensioner			1	175
Wire Puller			1	175
Pickup - 1/2 Ton			4	395
Pickup - 1 Ton			4	410
Welding Truck			2	395
Generator – 25 Kw			2	36
Crane - 35 Ton (Manlift)			2	250
Forklift - 10 K Reach			2	130
Forklift -15,000 lb.			1	130
Loader - 4-5 Yd			2	74
120' Manlift			2	74
Crane - 200 Ton			1	275
Above Grade Construction (Phase 2) (Index L-39 – 52 Construction Days)	8/1/2027	10/1/2027		
Pickup - 1/2 Ton			4	395
Pickup - 1 Ton			1	410
Generator – 25 Kw			2	36
120' Manlift			2	74

Based on review of construction modeling identified in Attachment 5.3-A to the PEA, the total diesel particulate emissions during the construction activities (L-02, L-03, L-04 and L-39) would cumulatively generate 0.217 tons of diesel particulates 2.5 microns or smaller (PM_{2.5}) which is the primary TAC considered in this analysis. In addition, per the PEA, these emissions assume the requirement to include at least 75 percent of Tier 4 diesel construction equipment.

Construction Emissions Calculations

The AERMOD dispersion model was used to determine the concentration of PM_{2.5} from the diesel exhaust generated during construction at the nearby residential receptor. The AERMOD files for the Project are provided in **Attachment A** to this Letter.

Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, and 2<16 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst-case cancer risk dose calculation is defined in Equation 1 below (OEHHA, February 2015).

$$\text{Equation 1} \quad \text{Dose}_{\text{air}} = C_{\text{air}} * (\text{BR}/\text{BW}) * A * \text{EF} * (1 \times 10^{-6})$$

Dose _{air}	=	Dose through inhalation (mg/kg/d)
C _{air}	=	Concentration in air (µg/m ³) Annual average DPM concentration in µg/m ³ - AERMOD predicts annual averages.
BR/BW	=	Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency (unitless, days/365 days)
1x10 ⁻⁶	=	Milligrams to micrograms conversion (10 ⁻³ mg/ µg), cubic meters to liters conversion (10 ⁻³ m ³ /l)

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. The worst-case cancer risk calculation is defined in Equation 2 below (OEHHA, February 2015):

$$\text{Equation 2} \quad \text{RISK}_{\text{inh-res}} = \text{DOSE}_{\text{air}} \times \text{CPF} \times \text{ASF} \times \text{ED}/\text{AT} \times \text{FAH}$$

RISK _{inh-res}	=	Residential inhalation cancer risk
DOSE _{air}	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor (mg/kg-day ⁻¹)
ASF	=	Age sensitivity factor for a specified age group (unitless)
ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

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Encinitas, CA 92024

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The OEHHA recommends that an exposure duration (residency time) during construction activities be over the construction period which for this project is 518 calendar days. This duration should be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). Health risk calculations are shown in **Attachment B** to this Letter.

Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the OEHHA (OEHHA, February 2015). Diesel Exhaust has a REL of 5 µg/m³ and targets the respiratory system.

Heath Risk Calculations

Over the construction duration, the project would emit 0.217 tons over 518-day elapsed period which works out to an average of 0.00439 grams of PM_{2.5} exhaust per second (g/s). Based on the site configuration, the average emission rate over the grading area is 3.74x10⁻⁸ grams/second per meter squared (g/s-m²), which was calculated as follows:

$$\frac{0.00439 \frac{\text{grams}}{\text{second}}}{29 \text{ acres} * 4,046 \frac{\text{meters}^2}{\text{acre}}} = 3.74 * 10^{-8} \frac{\text{grams}}{\text{second}} \frac{\text{meters}^2}{\text{second}}$$

Utilizing the AERMOD dispersion model, the worst-case annual concentration of DPM from Project construction is estimated at 0.00136 µg/m³. Utilizing Equation 2 above, the inhalation cancer risk for the closest residential receptor was found to be less than one in one million exposed which is less than the allowable 20 per one million exposed. Given this, a less than significant cancer risk is expected.

Finally, there are known acute and chronic health risks associated with diesel exhaust which are considered non-cancer risks. Since the Project construction emissions are 0.00136 µg/m³, the non-cancer risks would also be less than significant since 0.00136 µg/m³ divided by the REL of 5 µg/m³ yields a Health Hazard Index less than one. Therefore, no acute or chronic health risks are expected, and all health risks are considered less than significant.

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If you should have any questions regarding this assessment, please do not hesitate to contact (760) 473-1253.

Sincerely,
Ldn Consulting, Inc.



Jeremy Loudon

Attachments:

- A:** AERMOD Files
- B:** Cancer Risk Calculations

References:

- OEHHA. (2001). *Health Effects of Diesel Exhaust*. Retrieved from <https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf>
- OEHHA. (February 2015). *Air Toxics Hot Spots Program - Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments*. OEHHA.
- SJVAPCD. (2015). *Air Quality Thresholds of Significance – Toxic Air Contaminants*. Retrieved from <http://www.valleyair.org/transportation/0714-GAMAQI-TACs-Thresholds-of-Significance.pdf>

1 AERMOD PRIME - (DATED 23132)
AERMODPrMSPx VERSION
(C) COPYRIGHT 1998-2022, Trinity Consultants

Run Began on 8/19/2024 at 5:57:11

** BREEZE AERMOD
** Trinity Consultants
** VERSION 12.0

CO STARTING
CO TITLEONE Manning Substation Construction DPM
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CO RUNORNOT RUN
CO AVERTIME ANNUAL
CO POLLUTID PM10
CO FINISHED

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SO LOCATION PU28B001 AREA 713919.9 4053047.9 0
** SRCDESCR Construction Site
SO SRCPARAM PU28B001 3.75E-08 3 336.3 327.8 0 1
SO SRCGROUP ALL
SO FINISHED

RE STARTING
RE ELEVUNIT METERS
RE DISCCART 715028.3 4053748 0 0
** SENSITIV
** RCPDESCR D1
RE FINISHED

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ME UAIRDATA 23230 2017
ME PROFBASE 0 METERS
ME FINISHED

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** UNITS METER
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** HEMISPHERE N
** ORIGINLON 0
** ORIGINLAT 0
** PARALLEL1 0
** PARALLEL2 0
** AZIMUTH 0
** SCALEFACT 0
** FALSEEAST 0
** FALSENORTH 0

** POSTFMT UNIFORM
** TEMPLATE UserDefined
** AERMODEXE AERMOD_BREEZE_23132_64.EXE
** AERMAPEXE AERMAP_EPA_18081_64.EXE

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****

ME W186 43 MEOPEN: THRESH_MIN 1-min ASOS wind speed threshold used 0.50
ME W187 43 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 23132 *** *** Manning Substation Construction DPM *** 08/19/24
*** AERMET - VERSION 18081 *** *** *** 05:57:11
PAGE 1

*** MODELOPTS: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

** Model Options Selected:

- * Model Uses Regulatory DEFAULT Options
- * Model Is Setup For Calculation of Average CONCentration Values.
- * NO GAS DEPOSITION Data Provided.
- * NO PARTICLE DEPOSITION Data Provided.
- * Model Uses NO DRY DEPLETION. DDPLEYE = F
- * Model Uses NO WET DEPLETION. WETDPLT = F
- * Stack-tip Downwash.
- * Model Accounts for ELEVated Terrain Effects.
- * Use Calms Processing Routine.
- * Use Missing Data Processing Routine.
- * No Exponential Decay.
- * Model Uses RURAL Dispersion Only.
- * ADJ_U* - Use ADJ_U* option for SBL in AERMET
- * CCVR_Sub - Meteorological data includes CCVR substitutions
- * TEMP_Sub - Meteorological data includes TEMP substitutions
- * Model Assumes No FLAGPOLE Receptor Heights.
- * The User Specified a Pollutant Type of: PM10

**Model Calculates ANNUAL Averages Only

**This Run Includes: 1 Source(s); 1 Source Group(s); and 1 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 18081

**Output Options Selected:

Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 0.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Input Runstream File: aermod.inp
**Output Print File: aermod.out

▲ *** AERMOD - VERSION 23132 *** *** Manning Substation Construction DPM *** 08/19/24
*** AERMET - VERSION 18081 *** *** *** 05:57:11
PAGE 2

*** MODELOPTS: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	COORD (SW CORNER) Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
PU28B001	0	0.37500E-07	713919.9	4053047.9	0.0	3.00	336.30	327.80	0.00	1.00	NO		NO

▲ *** AERMOD - VERSION 23132 *** *** Manning Substation Construction DPM *** 08/19/24

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): PU28B001 ,

*** SENSITIVE DISCRETE RECEPTOR POINTS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
715028.30	4053748.00	0.00136			

*** AERMOD - VERSION 23132 *** *** Manning Substation Construction DPM *** 08/19/24
 *** AERMET - VERSION 18081 *** *** *** 05:57:11
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS 0.00136 AT (715028.30, 4053748.00, 0.00, 0.00, 0.00)		SR	
	2ND HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	3RD HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	4TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	5TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	6TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	7TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	8TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	9TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			
	10TH HIGHEST VALUE IS 0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)			

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

*** AERMOD - VERSION 23132 *** *** Manning Substation Construction DPM *** 08/19/24
 *** AERMET - VERSION 18081 *** *** *** 05:57:11
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*** MODELOPTs: RegDEFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
 A Total of 2 Warning Message(s)
 A Total of 173 Informational Message(s)
 A Total of 8760 Hours Were Processed
 A Total of 33 Calm Hours Identified
 A Total of 140 Missing Hours Identified (1.60 Percent)

***** FATAL ERROR MESSAGES *****
 *** NONE ***

***** WARNING MESSAGES *****
 ME W186 43 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
 ME W187 43 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 *** AERMOD Finishes Successfully ***

**Air Quality Health Risk Calculations (Worst-Case)
Manning Substation (Controlled)**

From CalEPA Annual Output	Emission per day (Ton/Total Construction Duration)	0.2174799				
	Construction Start	5/1/2026				
	Construction Complete	10/1/2027				
	Days	518				
	Construction Emission per day (lb/day)	0.839690734				
Used as an input to AERSCREEN	Annualized Emission Rate (Grams/Second)	0.004402545				
	Project Site Size (Acres)	29				
	Project Site Size (meters^2)	117358.8362				
	AERMOD input (Grams/Second-meters^2)	3.75135E-08				
	Concentration From AERMOD (Ug/M^3)	1.36E-03				
From AERSCREEN Hourly * 0.1 to convert to annual						
Duration	Days	Days to years				
	518	1.419178082				
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Calr (annual) - From F15	0.00136	0.00136	0.00136	0.00136	0.00136	0.00136
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000047	0.00000142	0.00000112	0.00000097	0.00000044	0.00000038
Construction Days	518	1.419178082				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	1.419178082	1.419178082	1.419178082	1.419178082	1.419178082
AT	70	70	70	70	70	70
FAH	1	1	1	1	0.73	0.73
Risk for Each Age Group	1.85162E-08	3.17372E-07	7.52084E-08	6.50758E-08	7.12048E-09	6.184E-09
Risk per million Exposed	0.018516206	0.317371687	0.075208355	0.065075754	0.007120481	0.006163999
Cancer Risk Per Million Duration	0.34					

Air Quality Health Risk Calculations (Worst-Case)
Mainsall Horizons AL - T3W/DPF

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	0.0077				
	Construction Start	1/1/2025				
	Construction Complete	11/18/2025				
	Days	321				
	Construction Emission per day (lb/day)	0.047975078				
	Annual Duration (Days)	365				
Used as an input to AERSCREEN	Annualized Emission Rate (Grams/Second)	0.000251536				
	Project Site Size (Acres)	12.4				
	Project Site Size (meters^2)	50181.01964				
	Length of Smalles Side (meters)	224.0112043				
	Concentration Hourly From AERSCREEN (Ug/M^3)	5.01E-09				
From AERSCREEN Hourly * 0.08 to convert to annual	Concentration Annual (Ug/M^3)	0.07452				
Duration	Days	518	Days to years	1.419178082		
Age (Years)	3rd Trimester (0.25)		0-2	2-9	2-16	16-30
						16-70
Calr (annual) - From F15	0.07452		0.07452	0.07452	0.07452	0.07452
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-Inh	0.00002583	0.00007798	0.00006160	0.00005330	0.00002397	0.00002075
Construction Days	518	1.419178082				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	1.419178082	1.419178082	1.419178082	1.419178082	1.419178082
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	8.62392E-07	1.47816E-05	2.9671E-06	2.56735E-06	3.9016E-07	3.37751E-07
Risk per million Exposed	0.862392281	14.7815863	2.967102914	2.567353338	0.390160489	0.337750871
	15.64397858					
Cancer Risk Per Million 9-years	18.61					
Cancer Risk Per Million 30-years	18.60					
Cancer Risk Per Million 70-years	18.55					

On-Site Emissions Grouping

Construction Phase	Group 1 – Manning Substation	Group 2 – 500 kV	Group 3 – 230 kV West of Junction	Group 4 – 230 kV East of Junction	Group 5 – Panoche Substation
General					
Survey	✓				
LSPGC Manning Substation					
Site Development	✓				
Below-Grade Construction	✓				
Above-Grade Construction (Phase 1)	✓				
Above-Grade Construction (Phase 2)	✓				
PG&E 500 kV Interconnections					
Structure Foundation Installation	✓	✓			
Structure Installation	✓	✓			
Conductor Installation	✓	✓			
PG&E 230 kV Interconnections					
Structure Foundation Installation	✓		✓		
Structure Installation	✓		✓		
Conductor Installation	✓		✓		
PG&E 230 kV Reconductoring					
Access Construction				✓	
Structure Foundation Installation				✓	
Structure Installation				✓	
Conductor Installation				✓	
LSPGC 230 kV Transmission Line					
Access Road Construction	✓		✓	✓	
Structure Foundation Installation	✓		✓	✓	
Structure Installation	✓		✓	✓	
Conductor Installation	✓		✓	✓	
PG&E 230 kV and 115 kV Structure Raises					
Structure Foundation Installation			✓	✓	
Structure Installation			✓	✓	
Conductor Installation			✓	✓	
PG&E Panoche Substation Modifications (Lines)					
Structure Foundation Installation					✓
Structure Installation					✓
Conductor Installation					✓
Structure Foundation Installation					✓
Structure Installation					✓
Conductor Installation					✓
PG&E 12 kV Distribution Line					
Distribution Extension to Substation	✓		✓		
LSPGC Telecommunications Extension					
Fiber Extension to Substation				✓	
PG&E Tranquility Switching Station Modifications					
Tranquility Outdoor				✓	
Tranquility Indoor				✓	
PG&E Panoche Substation Modifications (Station)					
Panoche Outdoor					✓
Panoche Indoor					✓
PG&E Los Banos, Gates, and Midway Substation Modifications					
Substation Modifications					✓
General					
Commissioning and Testing	✓		✓	✓	
Site & ROW Restoration	✓		✓	✓	