

Appendix D, Table 1

Project Energy Impact Analysis

PG&E Moraga-Oakland X 115 kV Rebuild Project

Fuel Consumption During Construction

Construction Phase	Fuel Type	Fuel Consumption (gallons)
Phase/Activity #1 - Rebuild Lines Overhead and Remove Existing East of Estates Dr	Gasoline	9,749
	Diesel	149,935
	Jet Fuel	38,119
Phase/Activity #2 - Rebuild Western Extent of Lines as Underground - West of Estates Dr	Gasoline	23,553
	Diesel	149,798
Phase/Activity #3 - Remove Existing Structures and Conductors West of Estates Dr	Gasoline	231
	Diesel	9,467
Phase/Activity #4a - Construction Activities at Moraga Substation	Gasoline	598
	Diesel	16
Phase/Activity #4b - Construction Activities at Oakland X Substation	Gasoline	1,291
	Diesel	14
Total	Gasoline	35,422
	Diesel	309,231
	Jet Fuel	38,119

Portion of Statewide Fuel Resources Used for Project Activities

Project Activity	Fuel Type	Consumed by Project (gallons) ^a	Statewide Fuel Resources (gallons) ^b	Consumed by Project (%)
Construction	Gasoline	35,422	12,746,185,200	0.0003%
	Diesel	309,231	2,373,378,000	0.013%
	Jet Fuel	38,119	4,530,960,000	0.001%

Notes:

^a Total gallons of fuel consumed for project construction represents the total gasoline, diesel, and jet fuel from employee vehicle trips, construction equipment, vendor delivery truck trips, material and equipment hauling truck trips, and helicopter operation during the construction phases, as applicable.

^b Data taken from the California Energy Commission's Weekly Fuels Watch Report, available at <https://www.energy.ca.gov/data-reports/reports/weekly-fuels-watch/refinery-inputs-and-production>. A conservative estimate of annual statewide fuel resources consumed is assumed to be equivalent to 100 percent of annual production/stocks consumed within the state for the period of January 1, 2023 through December 31, 2023.

Appendix D, Table 2
Phase/Activity #1 - Fuel Consumption for Rebuild Lines Overhead and Remove Existing East of Estates Dr
PG&E Moraga-Oakland X 115 KV Rebuild Project

Vehicle and Equipment Fuel Consumption

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Fuel Type ^b	Equipment Power Rating (hp)	Equipment Load Factor	Quantity per Day	Number of Days Used ^c	Hours per Day	Miles per Day	Equipment Fuel Consumption Rate (gallons/hour) ^e	Equipment Diesel Consumption (gallons/phase)	Equipment Gasoline Consumption (gallons/phase)	Vehicle Fuel Efficiency (miles/gallon) ^d	Vehicle Diesel Consumption (gallons/phase)	Vehicle Gasoline Consumption (gallons/phase)	Aircraft Jet Fuel Consumption Rate (gallons/LTO) ^g	Aircraft Jet Fuel Consumption Rate (gallons/hour of operation) ^h	Aircraft Jet Fuel Consumption (gallons/phase) ⁱ
ROW Clearing (vegetation, tree trimming)																	
10-Cu Dump Truck (remove green waste)	Heavy-duty Diesel	Diesel	NA	NA	3	30	NA	60	--	--	--	6.02	896.46	--	--	--	--
Boom Truck	Heavy-duty Diesel	Diesel	NA	NA	5	30	NA	60	--	--	--	6.02	1,494.10	--	--	--	--
Chain Saws	Chainsaws	Petrol/Gas	1.86	0.70	10	30	4	NA	0.25	--	300.00	--	--	--	--	--	--
Large Chipper (12 inch diameter veg)	Chippers/Stump Grinders/Shredders	Petrol/Gas	4.85	0.78	5	30	4	NA	0.75	--	450.00	--	--	--	--	--	--
Blowers	Leaf Blowers/Vacuums	Petrol/Gas	1.79	0.94	5	30	4	NA	0.40	--	240.00	--	--	--	--	--	--
Weed Wacker	Trimmers/Edgers/Brush Cutters	Petrol/Gas	1.74	0.91	5	30	4	NA	0.25	--	150.00	--	--	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	1	30	NA	60	--	--	--	29.38	--	61.26	--	--	--
Roads and Access: Construction Areas, Pulling Sites, Light Road Improvements for 3 of 12 miles																	
10-Cu Dump Truck	Heavy-duty Diesel	Diesel	NA	NA	1	10	NA	45	--	--	--	6.02	74.70	--	--	--	--
4,000 Gallon Water Truck	Medium-duty Diesel	Diesel	NA	NA	2	25	NA	50	--	--	--	8.54	292.86	--	--	--	--
%-Ton Pick-up Truck, 4 x 4 (stand by fire crew)	Heavy-duty Truck	Diesel	NA	NA	1	10	NA	30	--	--	--	15.54	19.30	--	--	--	--
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	2	4	NA	30	--	--	--	6.02	39.84	--	--	--	--
Skid Steer	Skid Steer Loaders	Diesel	71	0.37	1	10	5	NA	1.40	70.20	--	--	--	--	--	--	--
325 Excavator	Excavators	Diesel	36	0.38	1	10	5	NA	0.76	38.08	--	--	--	--	--	--	--
Skip Loader	Rubber Tired Loaders	Diesel	150	0.36	1	15	5	NA	2.68	201.36	--	--	--	--	--	--	--
D6 Dozer	Tractors/Loaders/Backhoes	Diesel	84	0.37	1	10	5	NA	1.85	92.71	--	--	--	--	--	--	--
Worker Commutes (3/4-ton pick-up)	Heavy-duty Truck	Petrol/Gas	NA	NA	4	25	NA	50	--	--	--	15.54	--	321.67	--	--	--
Light Duty Truck (inspectors)	Light-duty Auto/Truck	Petrol/Gas	NA	NA	1	12	NA	50	--	--	--	29.38	--	20.42	--	--	--
Guard Structures																	
Digger Derrick Line Truck	Heavy-duty Diesel	Diesel	NA	NA	2	47	NA	30	--	--	--	6.02	468.15	--	--	--	--
55-foot Bucket Truck	Off-Highway Trucks	Diesel	376	0.38	1	47	8	NA	8.22	3,091.38	--	--	--	--	--	--	--
20,000 Pound Capacity Forklift	Forklifts	Diesel	82	0.20	1	47	8	NA	0.98	368.99	--	--	--	--	--	--	--
Super Framer 10 Wheel Flat Bed	Heavy-duty Diesel	Diesel	NA	NA	1	47	NA	1	--	--	--	6.02	7.80	--	--	--	--
Heavy-Duty Vac Truck	Heavy-duty Diesel	Diesel	NA	NA	2	47	NA	1	--	--	--	6.02	15.61	--	--	--	--
Generator	Generator Sets	Diesel	14	0.74	1	47	8	NA	1.60	601.60	--	--	--	--	--	--	--
Flasher Board for Traffic Control	Signal Boards	Diesel	6	0.82	2	47	8	NA	0.50	375.33	--	--	--	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	6	47	NA	50	--	--	--	29.38	--	479.88	--	--	--
Worker Commutes	Medium-duty Diesel	Diesel	NA	NA	8	47	NA	50	--	--	--	8.54	2,202.34	--	--	--	--
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	4	47	NA	50	--	--	--	25.69	--	365.96	--	--	--
%-Ton Pick-up Truck, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	6	47	NA	30	--	--	--	15.54	544.26	--	--	--	--
1-Ton Crew Cab Pickup	Heavy-duty Truck	Diesel	NA	NA	4	47	NA	30	--	--	--	15.54	362.84	--	--	--	--
Foundations (Hole Digging, Foundation Setup/Cage, Pour Concrete, Finish/Removal of set up) and Removal of Foundations (East of CC)																	
10-Cu Dump Truck	Heavy-duty Diesel	Diesel	NA	NA	1	135	NA	45	--	--	--	6.02	1,008.51	--	--	--	--
Auger Truck	Bore/Drill Rigs	Diesel	83	0.50	1	15	8	NA	2.48	297.86	--	--	--	--	--	--	--
10-Cu Concrete Mixer Truck	Heavy-duty Diesel	Diesel	NA	NA	2	15	NA	75	--	--	--	6.02	373.52	--	--	--	--
%-Ton Pick-up Truck, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	2	135	NA	30	--	--	--	15.54	521.10	--	--	--	--
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	1	135	NA	30	--	--	--	6.02	672.34	--	--	--	--
Skid Steer/Front Loader	Skid Steer Loaders	Diesel	71	0.37	1	135	8	NA	1.40	1,516.26	--	--	--	--	--	--	--
Boom Truck	Heavy-duty Diesel	Diesel	NA	NA	1	135	NA	15	--	--	--	6.02	336.17	--	--	--	--
Backhoe/Front Loader	Tractors/Loaders/Backhoes	Diesel	84	0.37	1	135	8	NA	1.85	2,002.48	--	--	--	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	3	135	NA	10	--	--	--	29.38	--	137.84	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	135	NA	10	--	--	--	29.38	--	91.89	--	--	--
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	2	135	NA	10	--	--	--	25.69	--	105.12	--	--	--
Structures Replacement (Poles and Towers)																	
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	3	135	NA	30	--	--	--	6.02	2,017.03	--	--	--	--
Truck - Framer (Crew Pick Up)	Light-duty Truck	Petrol/Gas	NA	NA	2	135	NA	25	--	--	--	25.69	--	262.79	--	--	--
F250 4X4 Crewcab (3/4 T) Foreman	Heavy-duty Truck	Diesel	NA	NA	2	135	NA	25	--	--	--	15.54	434.25	--	--	--	--
%-Ton Pick-up Truck, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	2	135	NA	25	--	--	--	15.54	434.25	--	--	--	--
Hydro Seed Truck	Heavy-duty Diesel	Diesel	NA	NA	1	20	NA	60	--	--	--	6.02	199.21	--	--	--	--
Truck Cranes - 20 - 30 Ton	Cranes	Diesel	367	0.29	2	135	5	NA	6.27	8,470.06	--	--	--	--	--	--	--
100 - 280 Ton Crane	Cranes	Diesel	367	0.29	3	135	8	NA	6.27	20,328.13	--	--	--	--	--	--	--
Helicopter	UH-60 Blackhawk	Jet Fuel	NA	NA	3	22	5	NA	--	--	--	--	--	24.02	167.03	19,958.54	--
Water Truck	Heavy-duty Diesel	Diesel	NA	NA	1	22	NA	10	--	--	--	6.02	36.52	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	3	135	NA	10	--	--	--	29.38	--	137.84	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	135	NA	10	--	--	--	29.38	--	91.89	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	135	NA	10	--	--	--	29.38	--	91.89	--	--	--
Transition Structures Estates/Park - South of Park (C3/C4)																	
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	3	10	NA	30	--	--	--	6.02	149.41	--	--	--	--
Truck - Framer (Crew Pick Up)	Light-duty Truck	Petrol/Gas	NA	NA	2	10	NA	25	--	--	--	25.69	--	19.47	--	--	--
F250 4X4 Crewcab (3/4 T) Foreman	Heavy-duty Truck	Diesel	NA	NA	2	10	NA	25	--	--	--	15.54	32.17	--	--	--	--
%-Ton Pick-up Truck, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	2	10	NA	25	--	--	--	15.54	32.17	--	--	--	--
Truck Cranes - 20 - 30 Ton	Cranes	Diesel	367	0.29	1	10	5	NA	6.27	313.71	--	--	--	--	--	--	--
100 - 280 Ton Crane	Cranes	Diesel	367	0.29	1	10	8	NA	6.27	501.93	--	--	--	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	3	10	NA	10	--	--	--	29.38	--	10.21	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	10	NA	10	--	--	--	29.38	--	6.81	--	--	--
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	2	10	NA	10	--	--	--	25.69	--	7.79	--	--	--
Transition Structures Estates/Park - North of Park (C1/C2)																	
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	3	10	NA	30	--	--	--	6.02	149.41	--	--	--	--
Truck - Framer (Crew Pick Up)	Light-duty Truck	Petrol/Gas	NA	NA	2	10	NA	25	--	--	--	25.69	--	19.47	--	--	--
F250 4X4 Crewcab (3/4 T) Foreman	Heavy-duty Truck	Diesel	NA	NA	2	10	NA	25	--	--	--	15.54	32.17	--	--	--	--
%-Ton Pick-up Truck, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	2	10	NA	25	--	--	--	15.54	32.17	--	--	--	--
Truck Cranes - 20 - 30 Ton	Cranes	Diesel	367	0.29	1	10	5	NA	6.27	313.71	--	--	--	--	--	--	--
100 - 280 Ton Crane	Cranes	Diesel	367	0.29	1	10	8	NA	6.27	501.93	--	--	--	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	3	10	NA	10	--	--	--	29.38	--	10.21	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	10	NA	10	--	--	--	29.38	--	6.81	--	--	--
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	2	10	NA	10	--	--	--	25.69	--	7.79	--	--	--
Riser Structures at Oakland X																	

Appendix D, Table 2
Phase/Activity #1 - Fuel Consumption for Rebuild Lines Overhead and Remove Existing East of Estates Dr
PG&E Moraga-Oakland X 115 KV Rebuild Project

Vehicle and Equipment Fuel Consumption

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Fuel Type ^b	Equipment Power Rating (hp)	Equipment Load Factor	Quantity per Day	Number of Days Used ^j	Hours per Day	Miles per Day per Vehicle	Equipment Fuel Consumption Rate (gallons/hour) ^c	Equipment Diesel Consumption (gallons/phase)	Equipment Gasoline Consumption (gallons/phase)	Vehicle Fuel Efficiency (miles/gallon) ^d	Vehicle Diesel Consumption (gallons/phase)	Vehicle Gasoline Consumption (gallons/phase)	Aircraft Jet Fuel Consumption Rate (gallons/LTO) ^e	Aircraft Jet Fuel Consumption Rate (gallons/hour of operation) ^e	Aircraft Jet Fuel Consumption (gallons/phase) ^f
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	3	20	NA	30	--	--	--	6.02	298.82	--	--	--	--
Truck - Frammer (Crew Pick Up)	Light-duty Truck	Petrol/Gas	NA	NA	2	20	NA	25	--	--	--	25.69	--	38.93	--	--	--
F250 4X4 Crewcab (3/4 T) Foreman	Heavy-duty Truck	Diesel	NA	NA	2	20	NA	25	--	--	--	15.54	64.33	--	--	--	--
¾-Ton Pick-up Truck, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	2	20	NA	25	--	--	--	15.54	64.33	--	--	--	--
Truck Cranes - 20 - 30 Ton	Cranes	Diesel	367	0.29	1	20	5	NA	6.27	627.41	--	--	--	--	--	--	--
100 - 280 Ton Crane	Cranes	Diesel	367	0.29	1	20	8	NA	6.27	1,003.86	--	--	--	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	3	20	NA	10	--	--	--	29.38	--	20.42	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	20	NA	10	--	--	--	29.38	--	13.61	--	--	--
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	2	20	NA	10	--	--	--	25.69	--	15.57	--	--	--
Conductor Replacement																	
Line Puller	Other Construction Equipment	Diesel	82	0.42	2	133	8	NA	2.19	4,659.64	--	--	--	--	--	--	--
Trailer-Mounted Tensioner	Other Construction Equipment	Diesel	82	0.42	2	133	8	NA	2.19	4,659.64	--	--	--	--	--	--	--
55-foot Bucket Truck ^g	Off-Highway Trucks	Diesel	376	0.38	4	133	7	NA	8.22	30,617.85	--	--	--	--	--	--	--
Transport of 55-foot Bucket Truck	Heavy-duty Diesel	Diesel	NA	NA	4	133	NA	20	--	--	--	6.02	1,766.35	--	--	--	--
105-foot Bucket Truck ^g	Off-Highway Trucks	Diesel	376	0.38	2	133	7	NA	8.22	15,308.92	--	--	--	--	--	--	--
Transport of 105-foot Bucket Truck	Heavy-duty Diesel	Diesel	NA	NA	2	133	NA	20	--	--	--	6.02	883.18	--	--	--	--
120-foot Crane Truck ^g	Off-Highway Trucks	Diesel	376	0.38	2	133	7	NA	8.22	15,308.92	--	--	--	--	--	--	--
Transport of 120-foot Crane Truck	Heavy-duty Diesel	Diesel	NA	NA	2	133	NA	20	--	--	--	6.02	883.18	--	--	--	--
10,000 Pound Capacity Forklift	Forklifts	Diesel	82	0.20	1	133	7	NA	0.98	913.65	--	--	--	--	--	--	--
Transport of 10,000 Pound Capacity Forklift	Heavy-duty Diesel	Diesel	NA	NA	1	133	NA	20	--	--	--	6.02	441.59	--	--	--	--
Generator	Generator Sets	Diesel	14	0.74	2	133	7	NA	1.60	2,979.20	--	--	--	--	--	--	--
Transport of Generator ^h	Heavy-duty Diesel	Diesel	NA	NA	2	133	NA	20	--	--	--	6.02	883.18	--	--	--	--
Tractor Trailer (40-foot flatbed) ^g	Off-Highway Trucks	Diesel	376	0.38	1	133	5	NA	8.22	5,467.47	--	--	--	--	--	--	--
Transport of Tractor Trailer (40-foot flatbed) ^g	Heavy-duty Diesel	Diesel	NA	NA	1	133	NA	20	--	--	--	6.02	441.59	--	--	--	--
Light Ship Helicopter	MDS00	Jet Fuel	NA	NA	3	32	6	NA	--	--	--	--	--	--	6.28	38.40	7,976.31
Medium-sized Ship Helicopter ⁱ	407 Long Ranger/Jet	Jet Fuel	NA	NA	3	32	6	NA	--	--	--	--	--	--	7.77	49.16	10,184.40
Water Truck ^m	Heavy-duty Diesel	Diesel	NA	NA	1	32	NA	10	--	--	--	6.02	53.12	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	10	133	NA	50	--	--	--	29.38	--	2,263.25	--	--	--
Worker Commutes ⁿ	Medium-duty Diesel	Diesel	NA	NA	8	133	NA	50	--	--	--	8.54	6,232.15	--	--	--	--
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	10	133	NA	50	--	--	--	25.69	--	2,589.01	--	--	--
Truck - Light Duty Pickup	Light-duty Truck	Petrol/Gas	NA	NA	8	133	NA	30	--	--	--	25.69	--	1,242.72	--	--	--
Crew Cab Heavy Duty Pickup	Heavy-duty Diesel	Diesel	NA	NA	6	133	NA	30	--	--	--	6.02	3,974.30	--	--	--	--
Restoration (including SWPPP inspections)																	
Flat Bed (plants to install)	Heavy-duty Diesel	Diesel	NA	NA	1	20	NA	60	--	--	--	6.02	199.21	--	--	--	--
Crew Trucks	Light-duty Truck	Petrol/Gas	NA	NA	2	20	NA	60	--	--	--	25.69	--	93.44	--	--	--
Water Truck	Heavy-duty Diesel	Diesel	NA	NA	1	24	NA	60	--	--	--	6.02	239.06	--	--	--	--
Worker Commutes - Dry Weather Monthly Insp.	Light-duty Truck	Petrol/Gas	NA	NA	1	6	NA	60	--	--	--	25.69	--	14.02	--	--	--
Worker Commutes - Wet Weather Monthly Insp.	Light-duty Truck	Petrol/Gas	NA	NA	1	26	NA	60	--	--	--	25.69	--	60.73	--	--	--
Total Diesel Fuel Use for Construction Equipment and Vehicles (gallons)																149,935	
Total Gasoline Fuel Use for Construction Equipment and Vehicles (gallons)																9,749	
Total Jet Fuel Use for Construction Equipment and Vehicles (gallons)																38,119	

Notes:

NA = Parameter not required for computing fuel consumption.

^a Unless otherwise noted, equipment/vehicle list and daily use provided by PG&E.

^b Workers are conservatively assumed to travel in gasoline-fueled passenger vehicles or light-duty trucks, even though some of these vehicle trips may occur in electric or plug-in hybrid vehicles. Construction support vehicles are conservatively assumed to occur in diesel-fueled light/heavy-duty trucks, even though some of these vehicle trips may occur in gasoline-fueled or electric vehicles. Material and equipment transport are conservatively assumed to occur in diesel-fueled medium/heavy-duty trucks or heavy/heavy-duty trucks, even though some of these vehicle trips may occur in gasoline-fueled, electric, or natural gas-fueled vehicles.

^c Fuel consumption calculated from OFFROAD2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the equipment's horsepower rating. This output was generated using the OFFROAD Web Database (<https://arb.ca.gov/emfac/offroad/>). If data were not available from the OFFROAD Web Database, fuel consumption was either estimated by scaling available data or estimated using an internet search of similar and representative equipment.

^d Fuel efficiency calculated from EMFAC2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the presumed vehicle mix. This output was generated using the EMFAC2021 Web Database (<https://arb.ca.gov/emfac/>).

^e Fuel consumption rate for aircraft taken from Table 9 of the *Guidance on the Determination of Helicopter Emissions* (Rindisbacher and Chabbey 2015)

^f Used the following factor to estimate aircraft jet fuel consumption:

$$\text{Jet Fuel Density (kg/gal)} = 3.039$$

^g Based on the usage data provided, this vehicle was treated as a construction equipment which will primarily remain onsite.

^h Light-duty trucks with a power rating > 300 hp were conservatively treated as medium-duty trucks.

ⁱ Based on the equipment/vehicle type, this equipment/vehicle was assumed to be construction equipment which will primarily remain onsite and operate 8 hours per day.

^j A number of vehicles and equipment will be used for only a portion of the total duration for each phase.

^k These equipment will be transported to/from the site each day, with a one-way trip length of 10 miles.

^l Hours per Day data provided for the helicopters should represent hours of operation per day for the helicopter. Quantity per Day for the helicopters represents the number of LTO cycles per day. It was assumed that one of each type of helicopter would be sufficient for completing construction activities.

^m One water truck conservatively added to each phase in which helicopters are used to minimize potential dust associated with the helicopter landing zones. It was assumed that each water truck would be used for the same number of days as the helicopters for up to 10 miles per day.

Vehicle and Equipment Fuel Consumption

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Fuel Type ^b	Equipment Power Rating (hp)	Equipment Load Factor	Quantity per Day	Number of Days Used ^c	Hours per Day	Miles per Day per Vehicle	Equipment Fuel Consumption Rate (gallons/hour) ^e	Equipment Diesel Consumption (gallons/phase)	Equipment Gasoline Consumption (gallons/phase)	Vehicle Fuel Efficiency (miles/gallon) ^d	Vehicle Diesel Consumption (gallons/phase)	Vehicle Gasoline Consumption (gallons/phase)
Mobilization and Survey (Construction Marking, Veg Removal)														
10-Cu Dump Truck (remove green waste from trees)	Heavy-duty Diesel	Diesel	NA	NA	1	3	NA	60	--	--	--	6.02	29.88	--
Boom Truck (tree removal)	Medium-duty Diesel	Diesel	NA	NA	1	3	NA	60	--	--	--	8.54	21.09	--
Chain Saws	Chainsaws	Petrol/Gas	1.86	0.70	2	3	4	NA	0.25	--	6.00	--	--	--
Large Chipper (12 inch diameter veg)	Chippers/Stump Grinders/Shredders	Petrol/Gas	4.85	0.78	1	3	4	NA	0.75	--	9.00	--	--	--
Utility Truck	Light-duty Truck	Petrol/Gas	NA	NA	1	20	NA	15	--	--	--	25.69	--	11.68
Delivery Vehicles	Light-duty Truck	Petrol/Gas	NA	NA	1	20	NA	15	--	--	--	25.69	--	11.68
Traffic Control Trucks	Light-duty Truck	Petrol/Gas	NA	NA	3	10	NA	50	--	--	--	25.69	--	58.40
¾-Ton Pick-up Truck, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	2	10	NA	15	--	--	--	15.54	19.30	--
1-Ton Crew Cab Flatbed, 4 x 4	Heavy-duty Truck	Diesel	NA	NA	2	20	NA	15	--	--	--	15.54	38.60	--
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	1	10	NA	2	--	--	--	6.02	3.32	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	6	30	NA	50	--	--	--	29.38	--	306.30
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	6	30	NA	50	--	--	--	29.38	--	306.30
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	6	30	NA	50	--	--	--	25.69	--	350.39
Vaults (1 crew)														
CAT 328 Excavator	Excavators	Diesel	36	0.38	1	120	5	NA	0.76	456.94	--	--	--	--
CAT 928 Loader	Tractors/Loaders/Backhoes	Diesel	84	0.37	1	120	5	NA	1.85	1,112.49	--	--	--	--
JD 225 Excavator	Excavators	Diesel	36	0.38	1	120	5	NA	0.76	456.94	--	--	--	--
RT 100 - Terex Rough Terrain Crane	Cranes	Diesel	367	0.29	1	120	5	NA	6.27	3,764.47	--	--	--	--
2500 Dodge Ram Pickup	Heavy-duty Truck	Diesel	NA	NA	2	120	NA	50	--	--	--	15.54	772.00	--
3500 Dodge Ram Pickup	Heavy-duty Truck	Diesel	NA	NA	2	120	NA	50	--	--	--	15.54	772.00	--
T 880 Kenworth Dump Truck	Off-Highway Trucks	Diesel	376	0.38	1	120	5	NA	8.22	4,933.06	--	--	--	--
Concrete Truck	Off-Highway Trucks	Diesel	376	0.38	2	120	8	NA	8.22	15,785.79	--	--	--	--
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	1	120	NA	50	--	--	--	6.02	996.06	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	6	120	NA	50	--	--	--	29.38	--	1,225.22
Trenching and Duct Bank (2-3 crews)														
CAT 450 Backhoe	Tractors/Loaders/Backhoes	Diesel	84	0.37	3	240	5	NA	1.85	6,674.94	--	--	--	--
CAT 928 Loader	Tractors/Loaders/Backhoes	Diesel	84	0.37	3	240	5	NA	1.85	6,674.94	--	--	--	--
JD 225 Excavator	Excavators	Diesel	36	0.38	3	240	5	NA	0.76	2,741.67	--	--	--	--
Doosan Air Compressor 185 CFM	Air Compressors	Diesel	37	0.48	3	240	5	NA	1.02	3,669.56	--	--	--	--
T 880 Kenworth Dump Truck	Off-Highway Trucks	Diesel	376	0.38	3	240	10	NA	8.22	59,196.70	--	--	--	--
1500 Dodge Ram Pickup	Light-duty Truck	Petrol/Gas	NA	NA	3	240	NA	110	--	--	--	25.69	--	3,083.45
2500 Dodge Ram Pickup	Heavy-duty Truck	Diesel	NA	NA	3	240	NA	110	--	--	--	15.54	5,095.19	--
3500 Dodge Ram Pickup	Heavy-duty Truck	Diesel	NA	NA	3	240	NA	6	--	--	--	15.54	277.92	--
Ingersoll Rand DD 24 Roller	Rollers	Diesel	36	0.38	1	240	10	NA	0.81	1,953.34	--	--	--	--
Volvo VNX 300 Tractor	Off-Highway Trucks	Diesel	376	0.38	2	240	3	NA	8.22	11,839.34	--	--	--	--
350 kW Generator	Generator Sets	Diesel	14	0.74	1	60	5	NA	1.60	480.00	--	--	--	--
3500 Dodge Ram Pickup	Heavy-duty Truck	Diesel	NA	NA	1	60	NA	6	--	--	--	15.54	23.16	--
Welding Machine	Welders	Diesel	46	0.45	1	60	4	NA	1.19	284.79	--	--	--	--
Boom Truck	Heavy-duty Diesel	Diesel	NA	NA	1	60	NA	6	--	--	--	6.02	59.76	--
Concrete Truck	Heavy-duty Diesel	Diesel	NA	NA	1	90	NA	60	--	--	--	6.02	896.46	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	24	240	NA	50	--	--	--	29.38	--	9,801.73
Cable Installation and Splicing (2 crews)														
3500 Dodge Ram Pickup	Heavy-duty Truck	Diesel	NA	NA	2	55	NA	50	--	--	--	15.54	353.83	--
Semi Tractor	Off-Highway Trucks	Diesel	376	0.38	1	34	5	NA	8.22	1,397.70	--	--	--	--
Cable Winch	Other Construction Equipment	Diesel	82	0.42	1	55	5	NA	2.19	602.16	--	--	--	--
1500 Dodge Ram Pickup	Light-duty Truck	Petrol/Gas	NA	NA	2	90	NA	50	--	--	--	25.69	--	350.39
Cable Reel Cart	Other Construction Equipment	Diesel	82	0.42	1	55	5	NA	2.19	602.16	--	--	--	--
2 kW Generator	Generator Sets	Diesel	14	0.74	1	90	10	NA	1.60	1,440.00	--	--	--	--
Vacuum Truck	Heavy-duty Diesel	Diesel	NA	NA	1	4	NA	35	--	--	--	6.02	23.24	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	32	90	NA	50	--	--	--	29.38	--	4,900.87
Cable System Commissioning and Testing (1 crew)														
3500 Dodge Ram Pickup	Heavy-duty Truck	Diesel	NA	NA	2	15	NA	50	--	--	--	15.54	96.50	--
1500 Dodge Ram Pickup	Light-duty Truck	Petrol/Gas	NA	NA	2	15	NA	50	--	--	--	25.69	--	58.40
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	32	15	NA	50	--	--	--	29.38	--	816.81
Restoration and Paving														
Utility Truck	Light-duty Truck	Petrol/Gas	NA	NA	1	25	NA	50	--	--	--	25.69	--	48.67
Traffic Control Trucks	Light-duty Truck	Petrol/Gas	NA	NA	3	25	NA	50	--	--	--	25.69	--	146.00
Delivery Vehicles	Light-duty Truck	Petrol/Gas	NA	NA	1	25	NA	50	--	--	--	25.69	--	48.67
Drum Type Compactor	Other Construction Equipment	Diesel	82	0.42	1	25	5	NA	2.19	273.71	--	--	--	--
Road Grader	Other Construction Equipment	Diesel	82	0.42	1	25	5	NA	2.19	273.71	--	--	--	--
Street Sweeper	Sweepers/Scrubbers	Diesel	36	0.46	1	20	5	NA	0.91	90.58	--	--	--	--
Road Paving Machine	Other Construction Equipment	Diesel	82	0.42	1	20	5	NA	2.19	218.97	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	6	25	NA	50	--	--	--	29.38	--	255.25
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	6	25	NA	50	--	--	--	29.38	--	255.25
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	6	25	NA	50	--	--	--	25.69	--	291.99
Inspections														
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	25	NA	50	--	--	--	29.38	--	85.08
Inspector Vehicles	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	317	NA	50	--	--	--	29.38	--	1,078.87
Truck Drivers/Hauling														

Vehicle and Equipment Fuel Consumption

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Fuel Type ^b	Equipment Power Rating (hp)	Equipment Load Factor	Quantity per Day	Number of Days Used ^e	Hours per Day	Miles per Day per Vehicle	Equipment Fuel Consumption Rate (gallons/hour) ^c	Equipment Diesel Consumption (gallons/phase)	Equipment Gasoline Consumption (gallons/phase)	Vehicle Fuel Efficiency (miles/gallon) ^d	Vehicle Diesel Consumption (gallons/phase)	Vehicle Gasoline Consumption (gallons/phase)
Material Haul Trucks	Heavy-duty Diesel	Diesel	NA	NA	14	122	NA	50	--	--	--	6.02	14,177.31	--
Long Haul Dump Truck	Heavy-duty Diesel	Diesel	NA	NA	1	106	NA	50	--	--	--	6.02	879.86	--
Replant/Water Landscape Trees (2 years)														
Flat Bed (plants to install)	Heavy-duty Diesel	Diesel	NA	NA	1	10	NA	60	--	--	--	6.02	99.61	--
Crew Trucks	Light-duty Truck	Petrol/Gas	NA	NA	2	10	NA	60	--	--	--	25.69	--	46.72
Water Truck	Heavy-duty Diesel	Diesel	NA	NA	1	24	NA	60	--	--	--	6.02	239.06	--
Total Diesel Fuel Use for Construction Equipment and Vehicles (gallons)													149,798	
Total Gasoline Fuel Use for Construction Equipment and Vehicles (gallons)														23,553

Notes:

NA = Parameter not required for computing fuel consumption.

^a Unless otherwise noted, equipment/vehicle list and daily use provided by PG&E.

^b Workers are conservatively assumed to travel in gasoline-fueled passenger vehicles or light-duty trucks, even though some of these vehicle trips may occur in electric or plug-in hybrid vehicles. Construction support vehicles are conservatively assumed to occur in diesel-fueled light/heavy-duty trucks, even though some of these vehicle trips may occur in gasoline-fueled or electric vehicles. Material and equipment transport are conservatively assumed to occur in diesel-fueled medium/heavy-duty trucks or heavy/heavy-duty trucks, even though some of these vehicle trips may occur in gasoline-fueled, electric, or natural gas-fueled vehicles.

^c Fuel consumption calculated from OFFROAD2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the equipment's horsepower rating. This output was generated using the OFFROAD Web Database (<https://arb.ca.gov/emfac/offroad/>). If data were not available from the OFFROAD Web Database, fuel consumption was either estimated by scaling available data or estimated using an internet search of similar and representative equipment.

^d Fuel efficiency calculated from EMFAC2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the presumed vehicle mix. This output was generated using the EMFAC2021 Web Database (<https://arb.ca.gov/emfac/>).

^e A number of vehicles and equipment will be used for only a portion of the total duration for each phase.

Appendix D, Table 4

Phase/Activity #3 - Fuel Consumption for Remove Existing Structures and Conductors West of Estates Dr
 PG&E Moraga-Oakland X 115 kV Rebuild Project

Vehicle and Equipment Fuel Consumption

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Fuel Type ^b	Equipment Power Rating (hp)	Equipment Load Factor	Quantity per Day	Number of Days Used	Hours per Day	Miles per Day per Vehicle	Equipment Fuel Consumption Rate (gallons/hour) ^c	Equipment Diesel Consumption (gallons/phase)	Equipment Gasoline Consumption (gallons/phase)	Vehicle Fuel Efficiency (miles/gallon) ^d	Vehicle Diesel Consumption (gallons/phase)	Vehicle Gasoline Consumption (gallons/phase)
ROW Clearing														
10-Cu Dump Truck	Heavy-duty Diesel	Diesel	NA	NA	1	3	NA	60	--	--	--	6.02	29.88	--
Boom Truck (remove green waste)	Heavy-duty Diesel	Diesel	NA	NA	1	3	NA	60	--	--	--	6.02	29.88	--
Chain Saws	Chainsaws	Petrol/Gas	1.86	0.70	1	3	4	NA	0.25	--	3.00	--	--	--
Large Chipper (12 inch diameter veg)	Chippers/Stump Grinders/Shredders	Petrol/Gas	4.85	0.78	1	3	4	NA	0.75	--	9.00	--	--	--
Blowers	Leaf Blowers/Vacuums	Petrol/Gas	1.79	0.94	1	3	4	NA	0.40	--	4.80	--	--	--
Weed Wacker	Trimmers/Edgers/Brush Cutters	Petrol/Gas	1.74	0.91	1	3	4	NA	0.25	--	3.00	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	1	3	NA	60	--	--	--	29.38	--	6.13
Structure Removal (Poles and Towers)														
Lowboy Truck/Trailer	Heavy-duty Diesel	Diesel	NA	NA	3	40	NA	30	--	--	--	6.02	597.64	--
Truck - Framer (Crew Pick Up)	Light-duty Truck	Petrol/Gas	NA	NA	2	40	NA	25	--	--	--	25.69	--	77.86
F250 4X4 Crewcab (3/4 T) Foreman	Heavy-duty Truck	Diesel	NA	NA	2	40	NA	25	--	--	--	15.54	128.67	--
¾-Ton Pick-up Truck, 4 × 4	Heavy-duty Truck	Diesel	NA	NA	2	40	NA	25	--	--	--	15.54	128.67	--
Truck Cranes - 20 - 30 Ton	Cranes	Diesel	367	0.29	2	40	5	NA	6.27	2,509.65	--	--	--	--
100 - 280 Ton Crane	Cranes	Diesel	367	0.29	3	40	8	NA	6.27	6,023.15	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	3	40	NA	10	--	--	--	29.38	--	40.84
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	40	NA	10	--	--	--	29.38	--	27.23
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	2	40	NA	10	--	--	--	25.69	--	31.15
Restoration														
Worker Commutes - Inspection ^e	Light-duty Truck	Petrol/Gas	NA	NA	1	2	NA	60	--	--	--	25.69	--	4.67
Flat Bed (plants to install) ^e	Heavy-duty Diesel	Diesel	NA	NA	1	2	NA	60	--	--	--	6.02	19.92	--
Crew Trucks	Light-duty Truck	Petrol/Gas	NA	NA	2	5	NA	60	--	--	--	25.69	--	23.36
Total Diesel Fuel Use for Construction Equipment and Vehicles (gallons)													9,467	
Total Gasoline Fuel Use for Construction Equipment and Vehicles (gallons)													231	

Notes:

NA = Parameter not required for computing fuel consumption.

^a Unless otherwise noted, equipment/vehicle list and daily use provided by PG&E.

^b Workers are conservatively assumed to travel in gasoline-fueled passenger vehicles or light-duty trucks, even though some of these vehicle trips may occur in electric or plug-in hybrid vehicles. Construction support vehicles are conservatively assumed to occur in diesel-fueled light/heavy-duty trucks, even though some of these vehicle trips may occur in gasoline-fueled or electric vehicles. Material and equipment transport are conservatively assumed to occur in diesel-fueled heavy/heavy-duty trucks, even though some of these vehicle trips may occur in electric or natural gas-fueled vehicles.

^c Fuel consumption calculated from OFFROAD2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the equipment's horsepower rating. This output was generated using the OFFROAD Web Database (<https://arb.ca.gov/emfac/offroad/>). If data were not available from the OFFROAD Web Database, fuel consumption was either estimated by scaling available data or estimated using an internet search of similar and representative equipment.

^d Fuel efficiency calculated from EMFAC2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the presumed vehicle mix. This output was generated using the EMFAC2021 Web Database (<https://arb.ca.gov/emfac/>).

^e These vehicles will be used for only a portion of the total duration for this phase.

Appendix D, Table 5
Phase/Activity #4a - Fuel Consumption for Construction Activities at Moraga Substation
PG&E Moraga-Oakland X 115 kV Rebuild Project

Vehicle and Equipment Fuel Consumption

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Fuel Type ^b	Equipment Power Rating (hp)	Equipment Load Factor	Quantity per Day	Number of Days Used	Hours per Day	Miles per Day per Vehicle	Equipment Fuel Consumption Rate (gallons/hour) ^c	Equipment Diesel Consumption (gallons/phase)	Equipment Gasoline Consumption (gallons/phase)	Vehicle Fuel Efficiency (miles/gallon) ^d	Vehicle Diesel Consumption (gallons/phase)	Vehicle Gasoline Consumption (gallons/phase)
Equipment Delivery and Setup														
1-Ton Crew Cab Pickup (delivery) ^e	Heavy-duty Truck	Diesel	NA	NA	1	1	NA	50	--	--	--	15.54	3.22	--
Equipment Installation														
Fork Lift	Forklifts	Diesel	82	0.2	1	2	5	NA	0.98	9.81	--	--	--	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	40	NA	50	--	--	--	29.38	--	136.14
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	1	40	NA	50	--	--	--	29.38	--	68.07
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	1	40	NA	50	--	--	--	25.69	--	77.86
Dress/Test/Wire Equipment														
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	40	NA	50	--	--	--	29.38	--	136.14
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	1	40	NA	50	--	--	--	29.38	--	68.07
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	1	40	NA	50	--	--	--	25.69	--	77.86
Equipment Removal														
1-Ton Crew Cab Pickup (delivery)	Heavy-duty Truck	Diesel	NA	NA	1	1	NA	50	--	--	--	15.54	3.22	--
Inspections														
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	1	20	NA	50	--	--	--	29.38	--	34.03
Total Diesel Fuel Use for Construction Equipment and Vehicles (gallons)													16	
Total Gasoline Fuel Use for Construction Equipment and Vehicles (gallons)														598

Notes:

NA = Parameter not required for computing fuel consumption.

^a Unless otherwise noted, equipment/vehicle list and daily use provided by PG&E.

^b Workers are conservatively assumed to travel in gasoline-fueled passenger vehicles or light-duty trucks, even though some of these vehicle trips may occur in electric or plug-in hybrid vehicles. Vendor deliveries are conservatively assumed to occur in diesel-fueled light/heavy-duty trucks, even though some of these vehicle trips may occur in gasoline-fueled or electric vehicles.

^c Fuel consumption calculated from OFFROAD2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the equipment's horsepower rating. This output was generated using the OFFROAD Web Database (<https://arb.ca.gov/emfac/offroad/>). If data were not available from the OFFROAD Web Database, fuel consumption was either estimated by scaling available data or estimated using an internet search of similar and representative equipment.

^d Fuel efficiency calculated from EMFAC2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the presumed vehicle mix. This output was generated using the EMFAC2021 Web Database (<https://arb.ca.gov/emfac/>).

^e Mileage assumed consistent with other similarly sized vehicles used for this phase.

Phase/Activity #4b - Fuel Consumption for Construction Activities at Oakland X Substation
 PG&E Moraga-Oakland X 115 kV Rebuild Project

Vehicle and Equipment Fuel Consumption

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Fuel Type ^b	Equipment Power Rating (hp)	Equipment Load Factor	Quantity per Day	Number of Days Used	Hours per Day	Miles per Day per Vehicle	Equipment Fuel Consumption Rate (gallons/hour) ^c	Equipment Diesel Consumption (gallons/phase)	Equipment Gasoline Consumption (gallons/phase)	Vehicle Fuel Efficiency (miles/gallon) ^d	Vehicle Diesel Consumption (gallons/phase)	Vehicle Gasoline Consumption (gallons/phase)
Equipment Delivery and Setup														
Fork Lift	Forklifts	Diesel	82	0.2	1	1	8	NA	0.98	7.85	--	--	--	--
1-Ton Crew Cab Pickup (delivery)	Heavy-duty Truck	Diesel	NA	NA	1	1	NA	50	--	--	--	15.54	3.22	--
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	1	NA	50	--	--	--	29.38	--	3.40
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	1	1	NA	50	--	--	--	29.38	--	1.70
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	1	1	NA	50	--	--	--	25.69	--	1.95
Equipment Installation														
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	80	NA	50	--	--	--	29.38	--	272.27
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	80	NA	50	--	--	--	29.38	--	272.27
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	1	80	NA	50	--	--	--	25.69	--	155.73
Dress/Test/Wire Equipment														
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	40	NA	50	--	--	--	29.38	--	136.14
Worker Commutes	Light-duty Auto/Truck	Petrol/Gas	NA	NA	2	40	NA	50	--	--	--	29.38	--	136.14
Worker Commutes	Light-duty Truck	Petrol/Gas	NA	NA	1	40	NA	50	--	--	--	25.69	--	77.86
Equipment Removal														
1-Ton Crew Cab Pickup (delivery)	Heavy-duty Truck	Diesel	NA	NA	1	1	NA	50	--	--	--	15.54	3.22	--
Inspections														
Pick-up Truck	Light-duty Truck	Petrol/Gas	NA	NA	3	40	NA	50	--	--	--	25.69	--	233.59
Total Diesel Fuel Use for Construction Equipment and Vehicles (gallons)													14	
Total Gasoline Fuel Use for Construction Equipment and Vehicles (gallons)													1,291	

Notes:

NA = Parameter not required for computing fuel consumption.

^a Unless otherwise noted, equipment/vehicle list and daily use provided by PG&E.

^b Workers are conservatively assumed to travel in gasoline-fueled passenger vehicles or light-duty trucks, even though some of these vehicle trips may occur in electric or plug-in hybrid vehicles. Vendor deliveries are conservatively assumed to occur in diesel-fueled light/heavy-duty trucks, even though some of these vehicle trips may occur in gasoline-fueled or electric vehicles.

^c Fuel consumption calculated from OFFROAD2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the equipment's horsepower rating. This output was generated using the OFFROAD Web Database (<https://arb.ca.gov/emfac/offroad/>). If data were not available from the OFFROAD Web Database, fuel consumption was either estimated by scaling available data or estimated using an internet search of similar and representative equipment.

^d Fuel efficiency calculated from EMFAC2021 model output for the Bay Area Air Quality Management District in the year 2026, based on the presumed vehicle mix. This output was generated using the EMFAC2021 Web Database (<https://arb.ca.gov/emfac/>).

^e Mileage assumed consistent with other similarly sized vehicles used for this phase.