

## **Air Quality and GHG Modeling Assumptions**

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**Table 1. Onsite Construction Equipment**

Phase	County	Equipment Name	Number/Day	Hours/day	Fuel Type	HP	Start	End	Working Days
Laydown, substations and switch yards	Alameda	1-ton crew cab 4x4	2	8	Diesel	300	5/1/2021	6/30/2021	37
Laydown, substations and switch yards	Alameda	Road grader	1	8	Diesel	350	5/1/2021	6/30/2021	37
Laydown, substations and switch yards	Alameda	Track type dozer	1	8	Diesel	350	5/1/2021	6/30/2021	37
Laydown, substations and switch yards	Alameda	Drum type compactor	1	8	Diesel	250	5/1/2021	6/30/2021	37
Laydown, substations and switch yards	Alameda	Water truck	1	6	Diesel	350	5/1/2021	6/30/2021	37
Laydown, substations and switch yards	Alameda	Lowboy/truck/trailer	2	8	Diesel	500	5/1/2021	6/30/2021	37
Laydown, substations and switch yards	Alameda	Backhoe/front loader	1	8	Diesel	350	5/1/2021	6/30/2021	37
Road construction	Alameda	1-ton crew cab 4x4	2	8	Diesel	300	5/8/2021	7/31/2021	50
Road construction	Alameda	Road grader	2	8	Diesel	350	5/8/2021	7/31/2021	50
Road construction	Alameda	Track type dozer	2	8	Diesel	350	5/8/2021	7/31/2021	50
Road construction	Alameda	Drum type compactor	2	8	Diesel	250	5/8/2021	7/31/2021	50
Road construction	Alameda	Water truck	2	6	Diesel	350	5/8/2021	7/31/2021	50
Road construction	Alameda	Lowboy/truck/trailer	2	8	Diesel	500	5/8/2021	7/31/2021	50
Road construction	Alameda	Backhoe/front loader	1	8	Diesel	350	5/8/2021	7/31/2021	50
Road construction	Alameda	Excavator	1	8	Diesel	350	5/8/2021	7/31/2021	50
Road construction	Alameda	Rock crusher	1	8	Diesel	350	5/8/2021	7/31/2021	50
Turbine foundations	Alameda	1-ton crew cab 4x4	2	8	Diesel	300	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Road grader	3	8	Diesel	350	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Track type dozer	3	8	Diesel	350	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Drum type compactor	3	8	Diesel	250	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Water truck	3	6	Diesel	350	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Lowboy/truck/trailer	3	8	Diesel	500	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Backhoe/front loader	3	8	Diesel	350	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Excavator	2	8	Diesel	350	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Rock crusher	1	8	Diesel	350	6/3/2021	8/31/2021	44
Turbine foundations	Alameda	Cement trucks	3	8	Diesel	335	6/3/2021	8/31/2021	44
Turbine delivery and installation	Alameda	Crane	2	8	Diesel	500	7/1/2021	10/31/2021	79
Turbine delivery and installation	Alameda	Lowboy/truck/trailer	2	8	Diesel	500	7/1/2021	10/31/2021	79
Turbine delivery and installation	Alameda	Excavator	2	8	Diesel	400	7/1/2021	10/31/2021	79
Utility collector line installation	Alameda	1-ton crew cab 4x4	1	8	Diesel	300	6/15/2021	9/15/2021	68
Utility collector line installation	Alameda	Water truck	1	6	Diesel	350	6/15/2021	9/15/2021	68
Utility collector line installation	Alameda	Backhoe/front loader	1	8	Diesel	350	6/15/2021	9/15/2021	68
Utility collector line installation	Alameda	Trencher	1	8	Diesel	350	6/15/2021	9/15/2021	68
Utility collector line installation	Alameda	HDD bore machine	1	8	Diesel	350	6/15/2021	8/1/2021	33
Restoration and cleanup	Alameda	Road grader	3	8	Diesel	350	8/1/2021	11/30/2021	50
Restoration and cleanup	Alameda	Excavator	3	8	Diesel	350	8/1/2021	11/30/2021	50

**Table 2. Offsite Construction Vehicles**

Phase	County	Vehicle Type	Number/Day	Fuel Type	Miles/Trip	Total Trips	Start	End
WTG machines, pads and substation materials	Alameda	Light duty	3	Gasoline	1	350	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Light duty	3	Gasoline	1	350	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Light duty	3	Gasoline	23	350	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Heavy duty	4	Diesel	5	550	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Heavy duty	4	Diesel	1	550	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Heavy duty	4	Diesel	29	550	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Heavy duty	11	Diesel	6	1,250	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Heavy duty	11	Diesel	1	1,250	5/1/2021	10/31/2021
WTG machines, pads and substation materials	Alameda	Heavy duty	11	Diesel	19	1,250	5/1/2021	10/31/2021
Roads, WTG foundations and aggregate	Alameda	Light duty	37	Gasoline	1	3,000	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Light duty	37	Gasoline	1	3,000	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Light duty	37	Gasoline	23	3,000	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Heavy duty	57	Diesel	5	4,630	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Heavy duty	57	Diesel	1	4,630	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Heavy duty	57	Diesel	29	4,630	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Heavy duty	8	Diesel	6	650	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Heavy duty	8	Diesel	1	650	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	Alameda	Heavy duty	8	Diesel	19	650	5/1/2021	8/31/2021
WTG machines, pads and substation materials	San Joaquin	Heavy duty	3	Diesel	56	300	5/1/2021	10/31/2021
WTG machines, pads and substation materials	San Joaquin	Heavy duty	2	Diesel	16	200	5/1/2021	10/31/2021
Roads, WTG foundations and aggregate	San Joaquin	Heavy duty	34	Diesel	56	2,750	5/1/2021	8/31/2021
Roads, WTG foundations and aggregate	San Joaquin	Heavy duty	22	Diesel	16	1,800	5/1/2021	8/31/2021
Worker trips	Alameda	Light duty	69	Gasoline	25	10,000	5/1/2021	11/30/2021

**Table 3. Construction Site Disturbance**

Phase	Total Acres (Temporary and Permanent)
Laydown, substations and switch yards	15
Road Construction	221
Turbine foundations	322
Utility collector line installation	85
Restoration and cleanup	224

**Table 4. Operations and Maintenance**

Phase	County	Equipment Name	Number/Day	Hours/day	Fuel Type	HP	Start	End	Working Days	Daily Miles	Total Acres
Maintenance/operation	Alameda	1 ton crew cab 4x4	2	4	Diesel	300	1/1/2022	12/31/2022	262	120	-
Maintenance/operation	Alameda	Road grader	1	8	Diesel	350	1/1/2022	1/7/2022	5	-	1.00
Maintenance/operation	Alameda	Crane	1	8	Diesel	500	1/1/2022	1/7/2022	5	-	-
Maintenance/operation	Alameda	Lowboy/truck/trailer	1	2	Diesel	500	1/1/2022	1/14/2022	10	30	-
Maintenance/operation	Alameda	Generator	2	2	Diesel	100	1/1/2022	12/31/2022	262	-	-
Worker trips	Alameda	Light duty	16	-	Gasoline	-	1/1/2022	12/31/2022	262	1,704	-