

ASSUMPTIONS FOR AIR QUALITY AND NOISE ANALYSES

San Ardo ILA

- Site will include four amplification huts on a 24-foot by 72-foot (1,728 square feet) concrete pad, and one 300 kilowatt (kW) emergency generator on a 12-foot by 24-foot (288 square feet) concrete pad.
- Removal of small buildings on site generates 35 cubic yards of debris weighing 0.67 tons per yard.
- Dimensions of fenced compound = 115 feet by 66 feet.
- Area = 7,590 square feet = 0.174 acre.
- Area to be graded = compound area plus 10-foot wide perimeter.
- Length of perimeter = 362 feet.
- Area of graded perimeter = 3,620 square feet = 0.0831 acre.
- Total area to be graded = 11,210 square feet = 0.257 acre.
- Width of grading for 12-foot wide gravel-covered access road = 20 feet.
- Length of road = 1000 feet.
- Area of grading for road = 20,000 square feet = 0.46 acre.
- Two 1-foot wide fiber optic trenches are excavated between the building in the fenced compound and the property line. The maximum combined trenching distance is 1000 feet.
- Specialized construction workers commute to site the number of days required for each activity (e.g., site grading).
- General construction workers commute to site for sum of days required for set of activities.
- Wind erosion conservatively assumed to affect sum of disturbed site areas during sum of days needed for grading, trenching, utility installation, and access road construction, but not for days used to construct pads and place shelters. The emission factor is derived in Attachment A.
- Fugitive dust from travel of construction vehicles over site, including access road, is included in emission factor of 39.4 pounds of PM10 per day per acre of construction activity area. This emission factor is conservatively applied to the total time for activities associated with preparation and construction of the pad (i.e., site grading, pad construction, and shelter placement) times the total area of the fenced compound plus 10-foot perimeter area, and to construction of the access road. The emission factor is derived in Attachment A.
- The fugitive dust generated by trenching for the fiber optic cables and utility installation is simulated by a dirt/debris pushing emission factor published in the CEQA Air Quality Handbook of the South Coast Air Quality Management District. The emission factor is derived in Attachment A.
- Each piece of construction equipment is used at its full power emission factor to be conservative (i.e., load factor =1).