

## **ASSUMPTIONS FOR AIR QUALITY AND NOISE ANALYSES**

### **Colusa ILA**

- Building will be demolished and removed from the site.
  - Demolition will be accomplished with backhoe/excavator equipped with thumb and require 3 days at 8 hours per day.
  - Semi-end dump truck with a capacity of 20 tons will remove 70 cubic yards of debris.
  - Truck will travel one way distance to most distant landfill listed for site, assumed to be 100 miles.
  - A small diesel-powered saw will cut the existing concrete pad for 1 hour to allow placement of a new pad for 4 ILA huts plus generator.
- No grading will occur.
- Pad construction, trenching (& utility installation), shelter placement, and general construction operations will occur equal to that listed for ILA on vacant land.
- No access road will be constructed.
- Four amplification huts will be installed on a new pad constructed within the existing concrete pad.
- A 12-foot by 24-foot (288 square feet) section of the existing concrete pad will be reconstructed to support the housing to be erected around the 300 kilowatt (kW) emergency generator and engine.
- Two 1-foot wide fiber optic trenches are excavated between the existing building and the property line. The maximum combined trenching distance is 1000 feet.
- Specialized construction workers commute to the site the number of days required for each activity (e.g., trenching for fiber optic cable).
- General construction workers commute to site for sum of days required for the total set of activities.
- Wind erosion conservatively assumed to affect sum of disturbed site areas during sum of days needed for pad construction and trenching. The emission factor is derived in Attachment A.
- Fugitive dust from travel of construction vehicles over site 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 pad construction, trenching, and shelter placement times the area of the installed huts. The emission factor is derived in Attachment A.
- The fugitive dust generated by trenching for the fiber optic cables 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).