ASSUMPTIONS FOR AIR QUALITY AND NOISE ANALYSES
Santa Barbara ILA

- Building will be manually gutted.
  - Maximum volume of gutted material = ~ 120 cu. yd.
  - Bulk density of gutted material = 0.67 ton/cu. yd.
  - Maximum mass of gutted material = 80 tons.
  - Semi-end dump truck with a capacity of 20 tons will remove 80 tons of debris, requiring 4 trips.
  - Truck will travel one way distance to most distant landfill listed for site, assumed to be 100 miles.

- Minimal grading will be needed for the 11 cu. yd. generator pad, which is about 1/24 of the 270 cu. yd. full pad used for a vacant land ILA. The grading effort and emissions are assumed to be 1/8 of those used for a vacant land ILA.

- Pad construction will be assumed to be 1/8 that needed for a vacant land ILA.

- Trenching (& utility installation) and general construction operations will occur equal to that listed for ILA on vacant land.

- No access road will be constructed.

- Only the generator shelter needs to be placed with an effort ¼ that required to place generator shelter plus 4 amplifier huts.

- 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 minimal grading and trenching, but not for days used to construct generator pad and place shelters. 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 minimal grading, pad construction, and trenching times the area of the installed equipment. 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).