

Condition 44	Noise-Collection
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The County shall require that the backup power facility structures for the in-town collection system be designed so that the noise created from the backup diesel generator that would be located inside the structure would not exceed 45 dBA Leq at the nearest property line. The noise from the backup diesel generator may be attenuated through the use of a "manufacturer enclosure" or through incorporation of noise attenuation design features into the backup power facility structure.

Evidence of compliance:

The Los Osos Waste Water Project includes the construction of eight (8) back up power facility structures that will be used to house a back up generator, at each facility, for use in case of a power outage in Los Osos. Of the eight back up generators two will be fueled by diesel and six will be fueled by natural gas. A noise study was conducted by *Wieland Acoustics*, copy attached, to determine the noise to be emanated from each back up generator and to see if the noise level in dBA at the nearest property line is expected to exceed the 45 dBA limit set by Condition 44. If the noise level at the nearest property is expected to exceed the 45 dBA limit, the *Wieland* study was to provide design recommendations so that the noise level at the nearest property line does not exceed the 45 dBA limit.

It should be noted that the noise study specifically looked at the back up generators associated with the Lupine and West Paso pump stations. These two back up generators are fueled by natural gas and diesel, respectively, and are within back up facilities that are located closest to the property lines for each fuel type. Since these two facilities are the closest to property lines for each fuel type the design recommendations contained in the *Wieland Acoustics* study to reduce the noise level to no more than 45 dBA at the property lines will ensure that the noise level at the property lines near the other six back up generator sites will be less than the 45 dBA maximum set by Condition 44.

The design recommendations contained within sections 7-1 and 7-2 of the *Wieland Acoustics* study were complied with as follows:

Section 7-1 (Lupine Generator Facility – Natural Gas Generator)

- L-1 The building footprint for the Lupine back up generator was rotated 90°
- L-2 The *Wieland Acoustics* study recommends construction of a 6 feet high block sound wall on the northwest, southwest and southeast sides of the generator facility site. After considering visual impacts of a 6 feet high block wall on three sides of the site as shown on Exhibit 8-1 of the study, and comparing it to the noise levels at the nearest property lines if all design recommendations are implemented except for the sound wall, Exhibit 8-1a shows noise level between 45dBA and 50 dBA at three minor points along the property line, it was determined after consultation with the Environmental Division of Public Works, that the negative visual impacts associated with the block wall outweigh the noise reduction benefits if the wall is constructed. Therefore the block wall recommended in the *Wieland Acoustics* study will not be constructed.
- L-3 The generator and exhaust maximum sound power levels are noted in Tables 16230-A and 16231-B of the project contract documents, for which complete sets were previously provided to Planning. Copies of pages of the contract documents



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**Environmental Noise Study for the Proposed
Lupine and West Paso Standby Power Buildings
in the County of San Luis Obispo**

**Project File 11.056.00
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