TECHNICAL AREA: NOISE
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133. Please perform ambient monitoring immediately north of the tanks and simultaneously on 45th Street in Manhattan Beach. Include the appropriate level of analysis to ascertain industrial or plant generated noise versus ocean wave and vehicular traffic.

Response No. 133: Ambient monitoring was conducted as requested. Additionally, as part of the ESP II's efforts to work with the ESGS community, monitoring efforts were coordinated with local residents. Additionally, ESP II agreed to consider the effects of the removal of the two large fuel oil storage tanks as part of ESPR.

New noise measurements were taken on April 1 and 2 between 11:30 PM and 2:30 AM at locations on 45th Street and on the ESGS site northerly of the fuel storage tanks (see attached summary). The data was analyzed to determine what the noise contribution from the plant would be once the fuel tanks are demolished. The data indicates that the incremental change from tank removal would not exceed 3 dBA (L_{50}). The measurements also indicate that the dominant noise contribution from the site would be from existing Unit 4 and the existing gas compressor, neither of which is a part of the project.

The adjacent ocean is clearly a major contributor to ambient noise levels at the 45th street residences. Ambient nighttime noise includes the general sounds of waves crashing and the roar of the surf. The existing ESGS contributes moderately to the background noise also. However, it is evident that the existing tanks provide a barrier for the ESGS noise. Since removal of the tanks will only increase ambient noise levels less than 3 dba, it is probably accurate to say that overall, ESGS is a minor contributor to existing noise levels at the 45th street residences and that the dominant noise is of the ocean.

Removal of the fuel oil storage tanks on the south side of the ESGS boundary would result in short-term increases in noise levels at nearby noise-sensitive land uses. The total duration of removal is estimated to be four to five weeks; demolition of the tanks is expected to require one week, and additional cutting up of the tank pieces and removal from the project site is expected to require three to four weeks. The major equipment anticipated to be needed for the first phase of the work (tank demolition) would be hydraulic shears (mounted on a tracked excavator). The major equipment anticipated for the second phase of the work (additional cutting and removal) would be hydraulic shears, cutting torches, a tracked loader and heavy trucks.

Table 1
Summary of Results: Storage Tank "Insertion Loss" Measurements and Analysis

Measured Ambient Noise Levels (at Nearest Residence (ST-18A/ST-18B)):

Location	Leq	L90	L50
ST-18A	62	61	62
ST-18B	50	48	50

Estimated Noise - Plant Only (based upon measurements) from El Segundo Power Plant at Nearest Residence (ST-18A/ST-18B) without Storage Tanks [1]

Location	Leq	L90	L50
ST-18A	52	51	52
ST-18B	52	51	52

Resultant Difference[2] (between Measured Ambient Noise Levels and Estimated ESPP Noise Levels without Storage Tanks)

Location	Leq	L90	L50
ST-18A	-10	-10	-10
ST-18B	2	3	2

Subjective Effect of Changes in Noise Levels[3]

Change in Level (dBA)	Subjective Effect
3	Barely Perceptible
5	Clearly Perceptible
10	Twice as Loud

Leq – Sound level containing the same total energy over a given period of time.
L90 – Sound level exceeded 90 percent of the time.
L50 – Sound level exceeded 50 percent of the time.
ST-18A – Outside deck area on 4420 The Strand, Manhattan Beach, Ca 90266.
ST-18B – Inside residence with window open on 4420 The Strand, Manhattan Beach, Ca 90266.

1 - These calculations were verified independently by propagating the noise data from ST-22 out to the ST-18A/ST-18B location. Agreement between the two data sets was good, varying 0.3 dB to 1.5 dB (ST-22-propagated data would be lower in all cases).

2 - Negative values indicate that the measured ambient noise levels would exceed the noise levels from the plant. Positive values indicate that the plant noise levels would exceed the measured ambient noise levels.

3 - Source: Hassall, J.R. and K. Zaveri. 1988. Acoustic Noise Measurements. Fifth Edition. Brüel and Kjær Instruments, Inc. Copenhagen, Denmark.

134. Please provide proposed mitigation schemes if the data reveals the potential for noise impact.

Response No. 134: As explained in response to Data Request #133, above, no significant impacts are expected to Noise resources from ESPR. Because of that, no mitigation measures are required beyond the standard CEC conditions of certification, which ESP II has stipulated to.

Because ESP II is committed to working with the community, however, community input has been sought regarding ways in which ESPR can be enhanced to ensure that it represents a positive contribution to the community. An April 12 community meeting was conducted in the City of Manhattan Beach to receive input. A sample conceptual rendering was provided showing a 20-foot sound wall from several views with and without landscaping. Such a wall would effectively replace the decommissioned fuel tanks from a noise perspective and substantially enhance the aesthetics of the southern property line.

In addition to the one-on-one discussions and the presentation of noise data and visual solutions on April 12, the CEC has designated the April 18 workshop as having a visual/noise focus. Residents will have the opportunity to comment again on the information and design solutions that are being explored by the Applicant. The community work completed to date should allow the April 18 workshop to provide clear resolution as to what enhancements ESPR could have that would satisfy the community and allow them to view ESPR as a positive contributor to the environment.