

DOCKETED

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TECHNICAL MEMORANDUM

Date: 8/4/2025

To: Shahab Khoshmashrab, Project Manager, California Energy Commission

From: Paul Miller, Managing Principal, RCH Group
Luis Rosas, Noise Technical Associate, RCH Group

Re: CEC Willow Rock Measurement Results at NSA-7

In response to the CEC Willow Rock Opening Testimony comments on noise levels at NSA-7 (TN 265170), Luis Rosas (Noise Technician), conducted a long-term (24-hour) and a short-term noise measurement to evaluate ambient noise nearby Noise Sensitive Area 7 (NSA-7). Larson Davis SoundTrack LxT Sound Level Meters calibrated before and after the measurements were used for the long-term measurement and short-term measurement. This technical memorandum includes a 24-hour noise plot, site photo, and a figure showing the long-term and short-term noise measurement location.

The CEC Willow Rock Final Staff Assessment (TN 264843) estimated a predicted noise level of 44 dB, Leq (daytime) and 39 dB, Leq (nighttime) at NSA-7. These noise levels were estimated using the limited noise data at NSA-7 provided in the Supplemental Application (TN 254805).

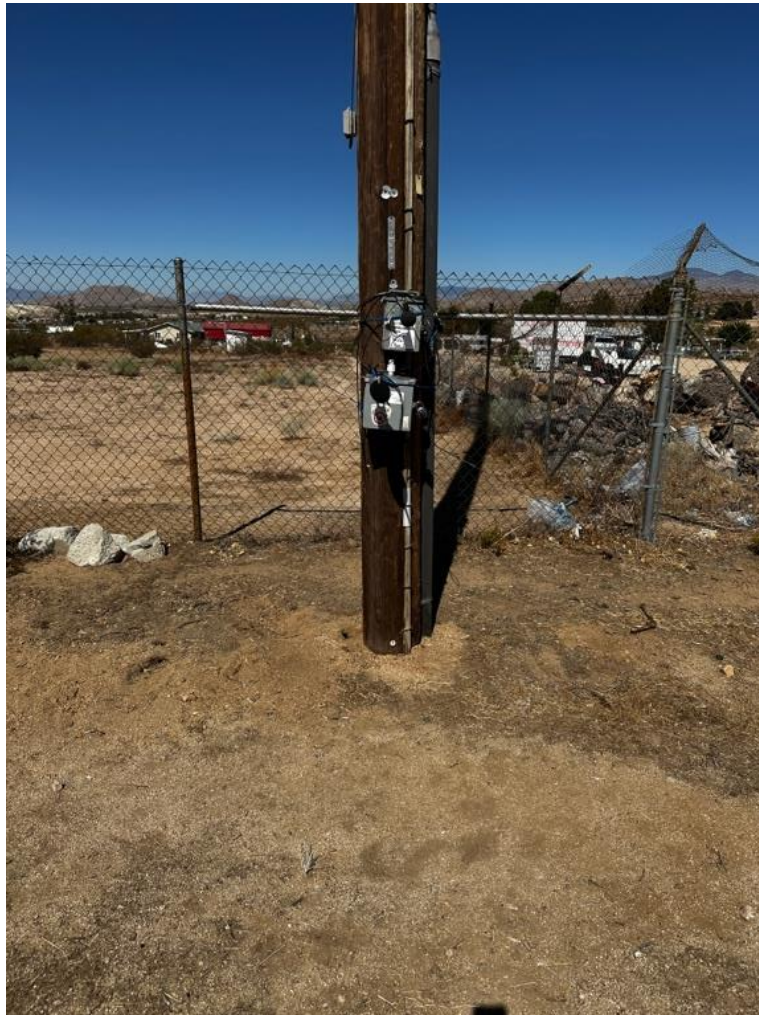
Table NOISE-1 presents the results of the noise measurements taken on August 1-2, 2025. The major sources of noise during the short-term measurements were 4-wheel ATVs (62-69 dB), cars driving on Dawn Road (60-68 dB), gunshots from a nearby shooting range (50-58 dB), and wind (32-38 dB). The average daytime noise level (7 a.m. to 10 p.m.) was 53 dB, Leq. The average nighttime noise level (10 p.m. to 7 a.m.) was 43 dB, Leq.

TABLE NOISE-1 EXISTING NOISE LEVELS

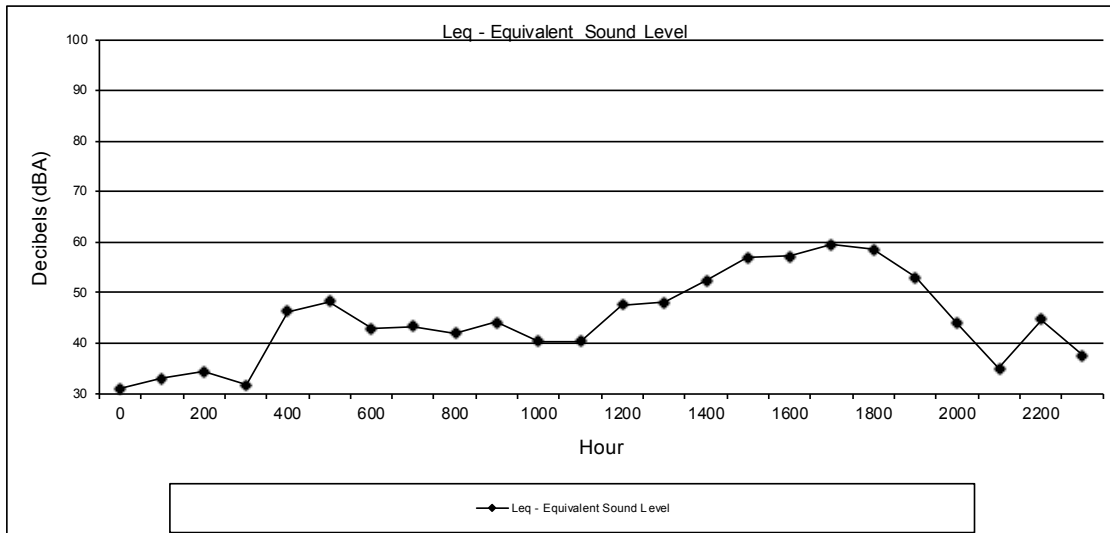
Location	Time Period	Noise Levels (dB)	Noise Sources
Site 1: Approximately 200 feet south of NSA-7	August 1, 10:00 a.m. through August 2, 9:00 a.m., 2025 24-hour measurement	Daytime (7:00 a.m. to 10:00 p.m.) Leq's ranged from: 35-60 Nighttime (10:00 a.m. to 7:00 p.m.) Leq's ranged from: 31-48	Unattended noise measurements do not identify noise sources.
Site 1: Approximately 200 feet south of NSA-7	Friday August 1, 2025 9:59 a.m. to 10:27 a.m. 28-minute measurement	1-minute Leq's ranged from 32-61.	4-wheel ATV's driving on Dawn Road were 62-69 dB. Cars driving on Dawn Road were 60-68 dB. Gunshots from nearby shooting range were 50-58 dB. Background noise was 32-38 dB (light wind).

NOISE MEASUREMENT LOCATION





View of long-term noise meter set up approximately 200 feet south of NSA-7



200 feet south of NSA-7
 Friday August 1, 2025 (10:00-23:00) to Saturday August 2, 2025 (0:00-9:00)

Hour	Leq - Equivalent Sound Level
0	31
100	33
200	34
300	32
400	46
500	48
600	43
700	43
800	42
900	44
1000	41
1100	41
1200	48
1300	48
1400	52
1500	57
1600	57
1700	60
1800	59
1900	53
2000	44
2100	35
2200	45
2300	38

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Average Daytime (7:00-22:00) Leq was 53 dB.
 Average Nighttime (22:00-7:00) Leq was 43 dB.