

EILAR ASSOCIATES, INC.

Acoustical and Environmental Consulting

210 South Juniper Street, Suite 100, Escondido, CA 92025
Phone: 760-738-5570 or 800-439-8205 • Fax: 760-738-5227
www.eilarassociates.com • info@eilarassociates.com

June 8, 2015

Job #B50308N1

Insignia Environmental
Attention: Stephanie Hansen
258 High Street
Palo Alto, California 94301

Subject: Ambient Noise Monitoring at SDG&E Rainbow and Lake Hodges Facilities

Per the request of Stephanie Hansen of Insignia Environmental, Eilar Associates, Inc. has conducted ambient noise monitoring at the SDG&E Rainbow and Lake Hodges Facilities in the County of San Diego, and City of Escondido, respectively. The purpose of this report is to establish the current ambient noise levels impacting the project sites in terms of hourly noise levels.

Sound Level Descriptors

All noise level or sound level values presented herein are expressed in terms of decibels, with A-weighting to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ} , for a specified duration. These metrics are used to express noise levels for both measurement and municipal regulations, and for enforcement of noise ordinances. Further explanation can be provided upon request.

Measurement Equipment

The following equipment was used at the site to measure ambient noise levels:

- Larson Davis Model 720, Type 2 Sound Level Meters, Serial # 0462 and 0190, with microphones & windscreens
- Larson Davis Model CA150, Type 2 Calibrator, Serial # 2056
- Digital Camera, Measurement Wheel

The sound level meters were field-calibrated immediately prior to the noise measurement and checked afterwards, to ensure accuracy. All sound level measurements conducted and presented in this report, in accordance with the regulations, were made with sound level meters that conform to the American National Standards Institute specifications for sound level meters (ANSI S1.4). All instruments are maintained with National Bureau of Standards traceable calibration, per the manufacturers' standards.

Noise Monitoring Results

Long-term noise monitoring was conducted at the two project sites between June 2 and June 4, 2015.

The noise monitor at the Rainbow site was placed approximately 110 feet from the Rainbow Valley Boulevard centerline and approximately 185 feet from the Old Highway 395 centerline, at the nearest residential property line, to the south of the proposed SDG&E equipment. Dominant noise sources in the vicinity of the site include Interstate 15 (I-15), Old Highway 395, and Rainbow Valley Boulevard. Results of this long-term noise monitoring conducted at the Rainbow site are shown in Table 1. For a graphical representation of the noise monitoring location for this measurement, please refer to Figure 1.

Table 1. Measured Hourly Average Ambient Noise Levels – Rainbow Site		
Date	Hour Beginning	Hourly Average Noise Level (dBA L_{EQ})
June 2, 2015	7:00 PM	58.2
	8:00 PM	55.7
	9:00 PM	54.9
	10:00 PM	53.4
	11:00 PM	53.6
	12:00 AM	54.3
June 3, 2015	1:00 AM	50.7
	2:00 AM	48.6
	3:00 AM	54.9
	4:00 AM	55.5
	5:00 AM	58.2
	6:00 AM	58.8
	7:00 AM	64.1
	8:00 AM	58.4
	9:00 AM	58.4
	10:00 AM	64.4
	11:00 AM	60.1
	12:00 PM	63.1
	1:00 PM	59.3
	2:00 PM	59.5
	3:00 PM	61.4
	4:00 PM	62.2
	5:00 PM	59.9
	6:00 PM	60.1
	7:00 PM	58.8
	8:00 PM	59.0
	9:00 PM	56.7
	10:00 PM	55.7
	11:00 PM	54.5
	12:00 AM	52.2
June 4, 2015	1:00 AM	52.4
	2:00 AM	52.3
	3:00 AM	53.7
	4:00 AM	56.4
	5:00 AM	59.7
	6:00 AM	60.1
	7:00 AM	59.0

During noise level monitoring conducted at the Rainbow site between June 2 and 4, 2015, ambient hourly noise levels ranged from 48.6 dBA L_{EQ} (from 2 a.m. to 3 a.m. on June 3) to 64.4 dBA L_{EQ} (from 10 a.m. to 11 a.m., also on June 3).

The noise monitor at the Lake Hodges site was placed approximately 265 feet from the Bear Valley Parkway centerline and approximately 295 feet from the Beethoven Drive centerline. The dominant source of noise in the vicinity of this project site is Bear Valley Parkway, with some contribution from I-15 and Beethoven Drive. The ambient monitoring location is located at the same approximate distance from Bear Valley Parkway as the proposed SDG&E equipment, and is therefore representative of the same ambient noise environment. Results of this long-term noise monitoring conducted at the Lake Hodges site are shown in Table 2. For a graphical representation of the noise monitoring location for this measurement, please refer to Figure 2.

Table 2. Measured Hourly Average Ambient Noise Levels – Lake Hodges Site		
Date	Hour Beginning	Hourly Average Noise Level (dBA L_{EQ})
June 2, 2015	6:00 PM	54.6
	7:00 PM	54.6
	8:00 PM	52.9
	9:00 PM	52.1
	10:00 PM	50.4
	11:00 PM	49.9
June 3, 2015	12:00 AM	45.2
	1:00 AM	38.9
	2:00 AM	38.6
	3:00 AM	40.3
	4:00 AM	45.5
	5:00 AM	53.3
	6:00 AM	51.2
	7:00 AM	50.3
	8:00 AM	51.3
	9:00 AM	49.8
	10:00 AM	50.2
	11:00 AM	50.6
	12:00 PM	51.1
	1:00 PM	52.8
	2:00 PM	53.5
	3:00 PM	55.1
	4:00 PM	56.5
	5:00 PM	54.8
	6:00 PM	54.6
	7:00 PM	54.6
8:00 PM	52.4	
9:00 PM	49.9	
10:00 PM	48.5	
11:00 PM	46.6	

Table 2. Measured Hourly Average Ambient Noise Levels – Lake Hodges Site		
Date	Hour Beginning	Hourly Average Noise Level (dBA L _{EQ})
June 4, 2015	12:00 AM	44.4
	1:00 AM	42.3
	2:00 AM	41.3
	3:00 AM	43.1
	4:00 AM	43.2
	5:00 AM	47.8
	6:00 AM	54.3

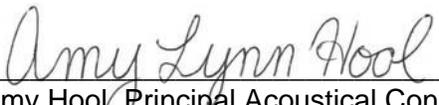
During noise level monitoring conducted at the Lake Hodges site between June 2 and 4, 2015, ambient hourly noise levels ranged from 38.6 dBA L_{EQ} (from 2 a.m. to 3 a.m. on June 3) to 56.5 dBA L_{EQ} (from 4 p.m. to 5 p.m., also on June 3).

Conclusion and Certification

It should be noted that measured noise levels may vary from day-to-day based on the number of vehicles passing a site, the number of aircraft overflights, or the presence of other unpredictable noise sources, such as nearby construction or special event traffic. The 37 hours of noise monitoring performed for this project are assumed to be generally representative of the current noise environment at both project sites.

This report is based on project information received and measured noise levels, and represents a true and factual analysis of the ambient noise environment at both the Lake Hodges and Rainbow sites, located in the City of Escondido and County of San Diego, respectively. This report was prepared by Jonathan Brothers and Amy Hool.

EILAR ASSOCIATES, INC.



Amy Hool, Principal Acoustical Consultant



Jonathan Brothers, Senior Acoustical Consultant

Figures

1. Satellite Aerial Photograph Showing Ambient Noise Monitoring Location – Rainbow Site
2. Satellite Aerial Photograph Showing Ambient Noise Monitoring Location – Lake Hodges Site

FIGURES



Eilar Associates, Inc.
210 South Juniper Street, Suite 100
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Satellite Aerial Photograph Showing Ambient Noise Monitoring Location - Rainbow Site
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Figure 1



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Satellite Aerial Photograph Showing Ambient Noise Monitoring Location - Lake Hodges Site
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Figure 2

