

**County of Santa Clara  
Department of Environmental Health**

**Fourth Quarter Noise Monitoring Report for  
Lehigh Southwest Cement Company  
24001 Stevens Creek Blvd.  
Cupertino, CA 95014**

In the fourth quarter of 2016 the Department of Environmental Health (DEH) received four complaints related to noise in the vicinity of the Lehigh Cement Plant. We performed four different measurements in four different locations as presented in Table 1 below.

**Table 1 - LEHIGH NOISE MONITORING - FOURTH QUARTER 2016**

<b>DATE AND TIME</b>	<b>LOCATION</b>	<b>dB(A) NOISE MEASUREMENT*</b>	<b>BACKGROUND NOISE OBSERVATIONS / COMMENTS</b>
11/27/16; 10:02 pm	Medina Lane <sup>1</sup>	44.6	Some sporadic background cricket noise and numerous plane flyby's; Lehigh Plant was inaudible
12/23/16; 11:42 pm	San Felipe Road <sup>1</sup>	44.7	Numerous plane flyby's and a car pass by but no cricket or other animal noises; Lehigh Plant was audible
12/29/16; 10:08 pm	Voss Avenue <sup>1</sup>	46.9	Freeway noise, a few plane passby's, a car pass by, a nearby car idling and people talking nearby but no cricket or other animal noises; Lehigh Plant was inaudible
12/30/16; 10:29 pm	Maria Lane	39.8	Observed numerous plane flyby's but no cricket or other animal noises; Lehigh Plant was inaudible

<sup>1</sup> - Background noise was dominant at Medina Lane, San Felipe Road, and Voss Avenue on 11/27/16, 12/23/16, and 12/29/16;

\* Noise meter Session Reports included in Attachment 1 and expressed as L<sub>eq</sub>

None of the readings above revealed a violation of the SCCOC noise ordinance due to the predominance of background noise.

**Conclusion**

Based upon our review of the data shown above DEH concludes that when the noise monitoring occurred, the Plant was operating in compliance with the SCC Noise Ordinance.

## Session Report

11/30/2016

### Information Panel

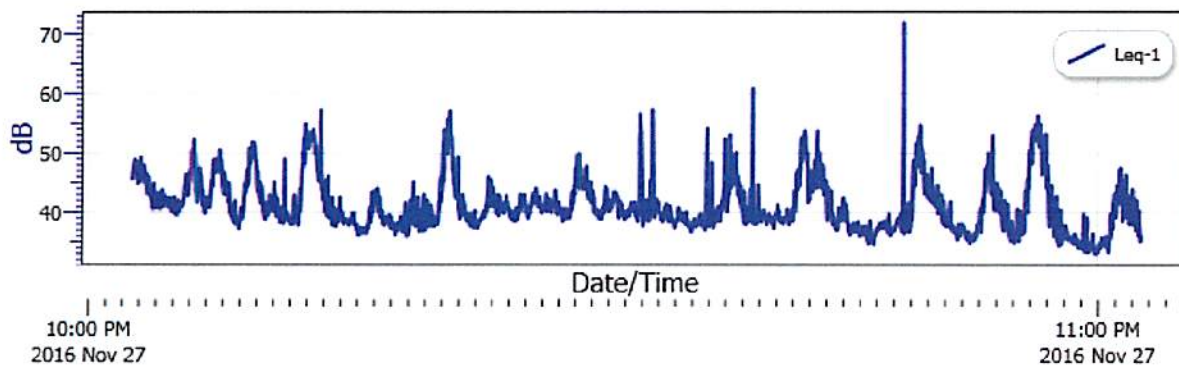
Name	Lehigh Cement-Medina Lane
Start Time	11/27/2016 10:02:34 PM
Stop Time	11/27/2016 11:02:34 PM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Noise was measured on Medina Lane in Cupertino, CA. Observed many plane flyby's and sporadic cricket noise. The weather was clear with some cloudiness and cold. No wind was observed.

### Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	44.6 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

### Logged Data Chart

Lehigh Cement-Medina Lane: Logged Data Chart



### Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
11/27/2016 9:13:38 PM	Calibration	114.0	QC-10	Q1L010123	5/19/2017





# Session Report

12/27/2016

## Information Panel

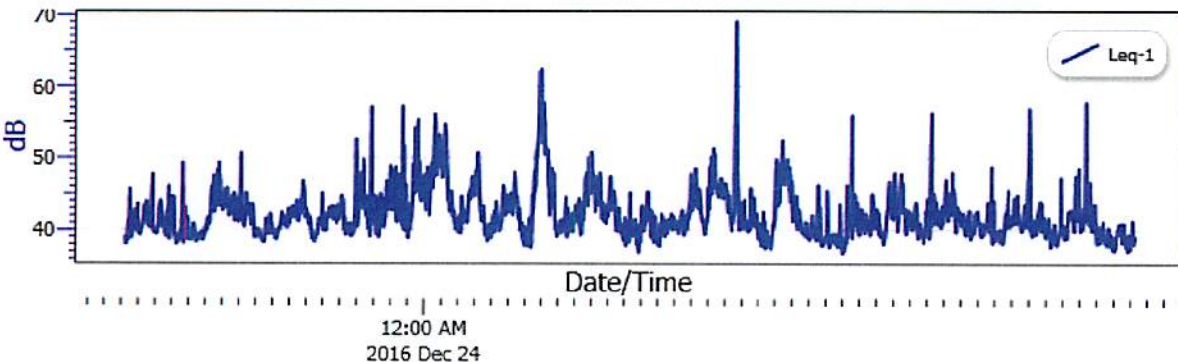
Name Lehigh Cement Plant Survey  
Start Time 12/23/2016 11:42:14 PM  
Stop Time 12/24/2016 12:42:14 AM  
Device Name BGK120021  
Model Type SoundPro DL  
Device Firmware Rev R.13H  
Comments Noise was measured on San Felipe Road in Cupertino, CA.  
Observed numerous plane flyby's and a car pass by.  
The weather was clear and cold.  
The wind speed was 0-4 mph.

## Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	44.7 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

## Logged Data Chart

S090\_BGK120021\_27122016\_112632: Logged Data Chart



## Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
12/23/2016 PM	11:13:43 Calibration	114.0	QC-10	QIL010123	5/19/2017



# Session Report

1/3/2017

## Information Panel

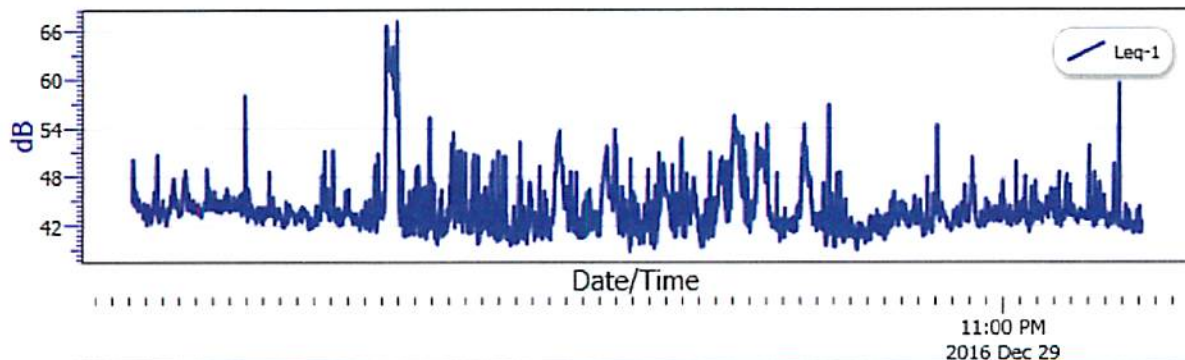
Name Lehigh Cement Plant Survey  
Start Time 12/29/2016 10:08:10 PM  
Stop Time 12/29/2016 11:08:10 PM  
Device Name BGK120021  
Model Type SoundPro DL  
Device Firmware Rev R.13H  
Comments Noise was measured on Voss Avenue in Cupertino, CA  
Observed a few plane flyby's, a car pass by, a nearby car idling, and people talking nearby.  
Observed no cricket or other background animal noise.  
The weather was clear and cold except for a few clouds.  
The wind speed was 0-2.6 mph.

## Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	46.9 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

## Logged Data Chart

Lehigh Cement- Voss Avenue: Logged Data Chart



## Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
12/29/2016	10:08:10 PM	46.9	SoundPro DL	BGK120021	5/10/2017

PM

12/29/2016 11:10:56 Verification  
PM

114.1

Smalltalk 1.2  
12/29/2016 11:10:56

Smalltalk 1.2  
12/29/2016 11:10:56

Smalltalk 1.2  
12/29/2016 11:10:56

Smalltalk 1.2  
12/29/2016 11:10:56

# Session Report

1/3/2017

## Information Panel

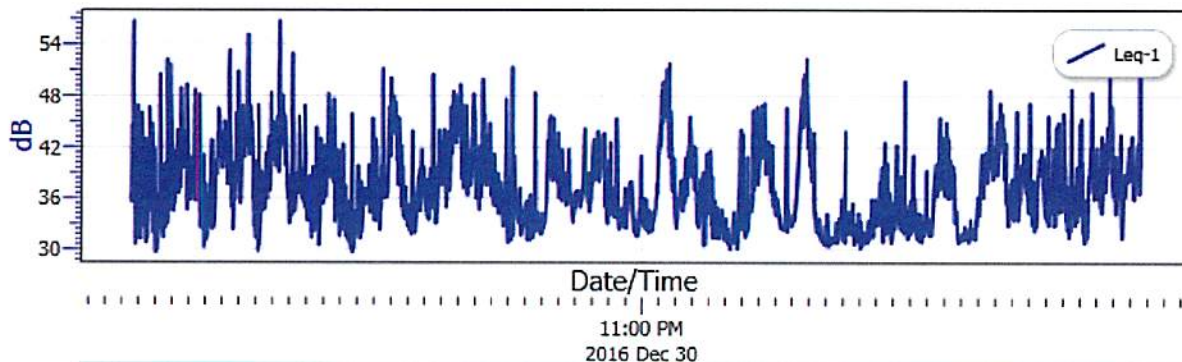
Name Lehigh Cement Plant Survey  
Start Time 12/30/2016 10:29:32 PM  
Stop Time 12/30/2016 11:29:32 PM  
Device Name BGK120021  
Model Type SoundPro DL  
Device Firmware Rev R.13H  
Comments Noise was measured on Maria Lane in Saratoga, CA.  
Observed numerous plane flyby's  
Observed no cricket or other animal background noise.  
The weather was clear and cold except for a few clouds.  
The wind speed was 0-8 mph.

## Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	39.8 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

## Logged Data Chart

Lehigh Cement- Maria Lane: Logged Data Chart



## Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
12/30/2016 9:58:56 PM	Calibration	114.1	QC-10	QIL010123	5/19/2017







**Lehigh Hanson**  
HEIDELBERGCEMENT Group

24001 Stevens Creek Blvd.  
Cupertino, CA 95014  
(408) 996-4000

November 30, 2016

**VIA CERTIFIED MAIL/RETURN RECEIPT**  
**7015 1520 0001 8270 3543**

Mr. Michael Balliet, Director  
County of Santa Clara  
Department of Environmental Health  
Consumer Protection Division  
1555 Berger Drive  
Suite 300  
San Jose, CA 95112-2716

**RE: Lehigh Southwest Cement Company—Permanente Plant  
Update on Sound Reduction Projects**

Dear Mr. Balliet:

On June 15, 2016, Lehigh Southwest Cement Company (Lehigh) committed to providing updates to the Santa Clara County Department of Environmental Health about ongoing projects intended to reduce the emissions of sound from the facility into the surrounding community. This letter details the recent progress in that regard.

As mentioned in past submittals, Lehigh is working to install sound suppressors on the first four (4) devices listed in the table, below. These sound suppressors have been delivered; installation is complete on the first 3, and the final suppressor is being installed today.

The table also lists projects completed on two (2) other sound sources, the G-Cooler and the compressor room. These projects include installation of sound insulating blankets and process changes (i.e., keeping the door closed at all times, unless it must be opened for maintenance access). Also included in the table are sound measurements taken prior to and subsequent to project completion for each source. Please note that a follow-up measurement of sound from fan 6FA19 will be taken upon project completion.

In addition, Lehigh experimented with changing the booster fan blade pitch angles. In September the fan blade angles were reduced from 25° to 16° in the hope that this would reduce turbulence and, therefore, sound frequency and amplitude. Unfortunately, the booster fan was unable to produce enough draft in the duct using this configuration to be functional, so the blade pitch was

**Santa Clara County, Department of Environmental Health  
Update on Sound Reduction Projects**

returned to its previous configuration. Lehigh continues to investigate additional options to reduce sound from the kiln stack booster fan.

Source	Modification	Sound Before (dBA)	Sound After (dBA)
7FA21	Suppressor	92.2	78.4
7FA11	Suppressor	100	83.3
7FA10b	Suppressor	104.3	103.1
6FA19	Suppressor	99.5	In progress
G-Cooler	Insulating blankets	82.5	77.9
Compressor room, north door	Closed door during normal operation	85.3	76.8
Compressor room	Insulating blankets	88	78.9

As recommended by the County in its August 17<sup>th</sup> letter, Lehigh is working with sound engineers from Burns and McDonnell to develop a formal sound monitoring program. The monitoring program will be provided to the Santa Clara County Department of Environmental Health when it is finalized.

This course of action demonstrates Lehigh's ongoing commitment to enhancing community relations and improving the local environment. Please feel free to contact me anytime at 408-996-4269 if you have comments, or if you would like more information.

Sincerely,



Sam Barket  
Environmental Manager

cc (via email):

Kari Saragusa, Lehigh  
Denzil Cotera, Lehigh  
Keith Krugh, Lehigh  
Ana Damonte, Lehigh