County of Santa Clara

Department of Environmental Health

Consumer Protection Division 1555 Berger Drive, Suite 300 San Jose, CA 95112-2716 (408)918-3400 FAX (408)258-5891 www.EHinfo.org



December 30, 2015

Sam Barket, Environmental Manager Lehigh Southwest Cement Company 24001 Stevens Creek Blvd. Cupertino, CA 95014

Re: Noise Complaints – Department of Environmental Health *Report of Findings* and Peer Review Report by dBF Associates Inc.

Dear Mr. Barket:

We are in receipt of the *Sound Compliance Study* dated December 14, 2015. I have enclosed a copy of the peer review performed by Jeff Fuller, dBF Associates Inc. and the Department of Environmental Health *Report of Findings*.

Based on this information, we have not found evidence that Lehigh was in violation of the noise ordinance during the time noise readings were taken.

We want to thank you for your cooperation throughout this investigation. Please note that we will continue to perform random, unannounced monitoring for a period of one year.

Please feel free to contact us at 408-918-3400 or via email at <u>dehweb@deh.sccgov.org</u> if you have any questions.

Sincerely,

Michael Balliet, Director Consumer Protection Division

County of Santa Clara Department of Environmental Health Noise Monitoring *Report of Findings* for Lehigh Southwest Cement Company 24001 Stevens Creek Blvd. Cupertino, CA 95014

I. Introduction

The Department of Environmental Health (DEH) is authorized to enforce the County of Santa Clara ("County") noise ordinance in unincorporated County. The noise ordinance is codified in Chapter VIII – Control of Noise and Vibration commencing with Section B11-150 of the Santa Clara County Ordinance Code (SCCOC). DEH responds to noise complaints such as neighborhood noise and other noise generating activities. DEH also coordinates with the Sheriff's Office for enforcement related to a one-time event, such as an after-hours disruptive party or other special event.

DEH received complaints starting in March 2015, alleging that noise related to the Lehigh Southwest Cement Company (Plant, located at 24001 Stevens Creek Blvd. in unincorporated Santa Clara County) had increased. DEH continued to receive complaints in April, May and June, for a total of fourteen complaints. The complaints generally described a low steady hum as the constant source of the increased noise, although some additional loud high pitched noises were also described.

DEH undertook an investigation regarding these complaints. On May 15, 2015, DEH requested that Lehigh Southwest Cement Company assist with the Department's investigation to determine whether noise levels generated by the Plant comply with the County noise ordinance. Lehigh retained a third-party noise expert, Burns & McDonnell, to test and analyze noise from the Plant. On December 14, 2015, Lehigh submitted a *Sound Compliance Study* to DEH.

DEH separately retained a third-party noise consultant to peer review the *Sound Compliance Study*. The peer review report was submitted to the County on December 30, 2015.

DEH also conducted an ongoing independent investigation that included concurrent readings during the *Sound Compliance Study* and a separate analysis of the noise. The results of the investigation and analysis are hereinafter set forth in this *Report of Findings*.

The Sound Compliance Study, Report of Findings, and third-party peer review of the Sound Compliance Study are intended to review noise coming from the Plant and evaluate that noise with applicable standards in the SCCOC.

II. Report of Findings

A. County Investigation

In March 2015, DEH received a complaint alleging noise from the Plant was higher than usual and requested monitoring by DEH. DEH responded by taking noise readings at different locations near the complainant's address and at a location closer to the Plant. The investigation revealed that DEH could not definitively link any specific noises to the Plant without additional monitoring. A violation of the noise ordinance is evidenced when:

- 1. The noise consistently exceeded the County noise ordinance; and
- 2. The noise was definitely originating from the Plant and not some other nearby source.

Given the number of complaints received, the type of noise, and complexity of the Plant operations, DEH met with Lehigh representatives on May 8, 2015, to discuss the concerns raised by neighbors. Lehigh officials explained that a new 295-foot tall exhaust stack and induced draft fan was activated in March 2015, in accordance with requirements from the Bay Area Air Quality Management District to meet air quality standards. The noise from the induced draft fan could be the source of the noise emanating from the Plant; however, due to the complexity of the noise evaluation and analysis, DEH requested that the Plant prepare a noise study and separately retain a third-party expert independently selected by the County to complete a peer review of that noise study. The County selected dBF Associates Inc. to serve as the peer reviewer. During this time the County also prepared a map identifying specific locations for where noise testing would occur. Locations were selected based on available information. The County and dBF Associates Inc. also reviewed the scope of work for the Sound *Compliance Study* and approved the locations of the residential measurement locations. During the September 8th and 9th monitoring DEH requested consent to access private properties that had filed a complaint, but was only successful at one property. In most cases, the monitoring took place at a nearby publicly accessible location.

B. Report of Findings Methodology

Noise is everywhere in the environment and the ability to determine if a specific noise is in violation of the noise ordinance relies on trained professionals to render their opinion based upon measurement data and field observations. The methodology used for the *Report of Findings* was designed to evaluate whether the Plant was in compliance with the noise ordinance. DEH measurements were made at certain receiving or impacted receptors, which are classified in Table 1 in accordance with the noise ordinance:

Receiving Land Use Category	Time Period	Maximum Noise Level (dBA)
One and two-family	10:00 pm-7:00 am	45
residential	7:00 am-10:00 pm	55
Multiple-family dwelling	10:00 pm-7:00 am	50
Residential Public Space	7:00 am-10:00 pm	55
Commercial	10:00 pm -7:00 am	60
	7:00 am-10:00 pm	65
Light Industrial	Any Time	70
Heavy Industrial	Any Time	75

Table 1 – Noise Limits (SCCOC § B11-152, Table B11-152)

Table 1 lists the various maximum noise levels as measured in dBA for different types of land uses and time periods throughout the day. "dBA" is the A-weighted sound level which is the sound pressure level in decibels as measured on a sound level meter using the A-weighted network. An "A-weighted" network best replicates human hearing. The complaints received by the County came from persons living at one or two family residential units and thus fell into the one and two family residential land use category.

The noise ordinance also provides for two noise level corrections:

- If the noise measurement occurs on a property adjoining a different land use category, the noise limit applicable to the lower land use category, plus five dB, will apply. DEH did not apply the increase for adjacent land use category (SCCOC B11-152(a)(4)).
- In the event the alleged offensive noise contains a steady, audible tone such as a whine, screech or hum or contains music or speech, the standard limits set forth in Table 1 (above) will be reduced by five dB (SCCOC B11-152(b)).

The complaints described, and field observation confirmed, that the noise contained a steady whine or hum. Therefore, DEH reduced the noise limits by five dB. Consequently, the one and two-family residential limits for DEH's investigation were:

10:00 pm-7:00 am	40 dBA
7:00 am-10:00 pm	50 dBA

For the purposes of the Lehigh *Noise Compliance Study* the same regulatory limit was used.

1. Time Factor in Noise Monitoring

The noise ordinance also takes into account the amount of time the sound can exceed the noise limits identified in Table 1:

Noise Standard Described in Table 1	Time Limit (cumulative minutes in any hour)
Noise Standard in Table 1	30 minutes
Noise Standard in Table 1 plus five dB	15 minutes
Noise Standard in Table 1 plus 10 dB	5 minutes
Noise Standard in Table 1 plus 15 dB	1 minute
Noise Standard in Table 1 plus 20 dB	Not allowed for any period of time

Table 2 – Time Factor in Noise Monitoring (SCCOC B11-152(a)(2))

Since the DEH measurements presented in Table 4 only showed an exceedance due to background noise (i.e. crickets, traffic), there was no adjustment for the time factor in determining a violation.

2. Noise Monitoring Equipment Standard

The calibrated sound level meter used was a type two 3M SoundPro DL conforming to the current ANSI standard. The meter was last calibrated in April 2015 (Attachment 1). All noise levels that were measured were filtered to use the "A-weighted" network that best replicates human hearing on a type two meter.

C. <u>DEH Review of Lehigh Sound Compliance Study</u> (Burns & McDonnell, December 2015)

The measurements for the *Sound Compliance Study* were performed by Burns & McDonnell on September 8 and 9, 2015. DEH staff and Jeff Fuller of dBF Associates were present to observe operating conditions and to provide a level of quality control to ensure accurate reporting. In addition, DEH performed its own independent readings at several locations (all residential land use). The results of the independent monitoring and observations by DEH are summarized in Table 3 below.

DATE / TIME	LOCATION*** (From Sound Compliance Study, Burns & McDonnell Figure 4-2 & 4-3)	DEH NOISE MEASUREMENT RANGE dB(A) **	OBSERVATIONS / COMMENTS
09/08/15 7:13pm	MP6	32-39	Cricket and gunfire noise (from nearby gun range) were dominant Sounds from plant were not audible
09/08/15 7:36pm	MP15	33-35	Cricket and gunfire noise (from nearby gun range) were dominant

Table 3 – DEH Readings for September 8 and 9 Noise Monitoring

			Sounds from plant were not audible
09/08/15	MP14	39-49	Cricket and gunfire noise (from
7:52pm			nearby gun range) were dominant
			Sounds from plant were not audible
09/09/15	MP7	47-50	Freeway and cricket noise were
12:15am			dominant
			Sounds from plant were not audible*
09/09/15	MP8	45-47	Freeway and cricket noise were
12:34am			dominant
			Sound from plant was barely audible*
09/09/15	MP9	37-38	Freeway and cricket noise were
12:52am			dominant
			Sound from plant was audible
09/09/15	MP5	34-36	Freeway and cricket noise were
01:10am			dominant
			Sounds from plant were not audible
09/09/15	MP11	40-41	Freeway and cricket noise were
01:25am			dominant
			Sounds from plant were not audible*
09/09/15	MP6	35-36	Freeway noise and rooster crowing
06:40am			Sounds from plant were not audible
09/09/15	MP15	41-43	Freeway noise and chirping birds
06:57am			Sounds from a plant were audible
			(could have been a nearby plant)*
09/09/15	MP14	41-43	Freeway noise and backup truck
07:15am			noise
			Sounds from a plant were audible
			(could have been a nearby plant)*
1			

* Exceedance was due to background noise

** The indicated sound level measurements represent the L_{eq} within the 10 minute intervals. (L_{eq} is the noise level that is the equivalent continuous sound over time – also considered an average.)

*** Figures from *Sound Compliance Study*, Burns & McDonnell Figure 4-2 & 4-3 included as Attachment 2 None of the readings above revealed a violation of the noise limits in the SCCOC.

D. Additional DEH Noise Monitoring Results

In addition to the September 8 and 9 monitoring conducted by Burns & McDonnell, DEH also performed additional noise monitoring at the locations listed below before and after September 8 and 9, 2015. The Plant was <u>not</u> notified of any of the measurement dates, times, locations, or results. The additional readings were taken by DEH and in conjunction with the Lehigh *Sound Compliance Study* and provides independent verification that the noises DEH was hearing and measuring were either directly linked back to the Plant or not.

DATE AND TIME	LOCATION	dB(A) NOISE MEASUREMENT**	OBSERVATIONS / COMMENTS
3/15/15; 4:04 am	Lebanon Drive	34.9	No background noises observed
3/15/15; 5:34 am	Stevens Creek Blvd. (near the plant entrance)	54.8	No background noises observed Location of noise reading was Heavy Industrial Land Use (75 dBA limit)
9/23/15; 3:05 pm	Montebello Road	48.9	None except occasional cars. Plant noise audible but could be another source
10/3/15; 2:22 am	Sycamore Drive*	43.4	Traffic and cricket noise dominant; Lehigh Cement plant noise audible
10/3/15; 3:49 am	Canyon Oak Drive*	41.7	Traffic and cricket noise dominant; Lehigh Cement plant noise audible
10/11/15; 11:21 pm	Montebello Road*	49.5	Cricket noise was dominant; Lehigh Cement plant noise audible
10/12/15 12:34 am	Montebello Road*	45.6	Cricket noise was dominant; Lehigh Cement plant noise audible

 Table 4 – DEH Readings on Dates Other Than September 8 and 9, 2015

10/15/15; 10:23pm	Lebanon Drive*	39.9	Cricket noise dominant; Lehigh Cement plant barely audible
10/15/15; 11:46pm	Ridgeway Drive*	60.2	Cricket noise and heavy truck and car traffic noise was dominant; Lehigh noise was audible

*Background noise at Sycamore Drive and Canyon Oak Drive on 10/3/15 was higher than the Lehigh Cement Plant which was barely audible; Locations near Montebello Road on 10/11/15 and 10/12/15 background noise was higher than the Lehigh Cement Plant noise which was audible; Location near Lebanon Drive and Ridgeway Drive on 10/15/15- background noise was higher than the Lehigh Cement Plant the Lehigh Cement Plant noise which was audible.

** Noise meter Session Reports included in Attachment 3

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

E. Conclusions

Based upon DEH's review of the Burns & McDonnell *Sound Compliance Study* (dated December 2015), the peer review report prepared by dBF Associates Inc., and the independent DEH monitoring, DEH concludes that when the noise monitoring occurred, the Plant was operating in compliance with the SCCOC noise ordinance.

III. Recommendations

Although no violations of the noise ordinance were observed by DEH, we encourage the Plant to establish a noise monitoring program to evaluate noise on a more regular basis. We also recommend that the noise readings generated be made available for public review.

DEH intends to continue to perform unannounced quarterly noise monitoring for a period of one year to ensure ongoing compliance. Results from this noise monitoring will be posted to the County's website.

ATTACHMENT 1

3M Detection Solutions 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.3M.com/detection 262 567 9157 800 245 0779 262 567 4047 Fax



Certificate of Calibration

Certificate No: 5511301QIL010123

Serial Number:

Submitted By:	COUNTY	OF SANT	TA CLARA	DEH	SA
	1555 BE	RGER DF	R #300		
	SAN JOS	SE, CA	95112		

Serial Number:	QIL010123	Date Received:	4/16/2015
Customer ID:		Date Issued:	4/27/2015
Model:	QC-10 CALIBRATOR	Valid Until:	4/27/2016
Test Conditions:		Model Conditions	:
Temperature:	18°C to 29°C	As Found:	IN TOLERANCE
Humidity:	20% to 80%	As Left:	IN TOLERANCE
Barometric Pressure:	890 mbar to 1050 mbar		

SubAssemblies:

Description:

Calibration Procedure: 56V981

Reference Standard(s):

I.D. Number	Device	Last Calibratio	on Date Calibration Due
ET0000556	B&K ENSEMBLE	6/19/2014	6/19/2015
T00230	FLUKE 45 MULTIMETER	2/14/2014	2/14/2016

Measurement Uncertainty:

+/- 1.1% ACOUSTIC (0.1DB) +/- 1.4% VAC +/- 0.012% HZ Estimated at 95% Confidence Level (k=2)

Calibrated By:	ave mo	4/27/2015	
caliblated by.	JOSE ORALES	Service Technician	
Reviewed/Approved By:	Technical Manager	Contraction of the second seco	4/27/2015

This report certifies that all calibration equipment used in the test is traceable to NIST or other NMI, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of 3M Detection Solutions.



3M Oconomowoc Personal Safety Division 3M Detection Solutions 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.3M.com/detection 262 567 9157 800 245 0779 262 567 4047 Fax



Certificate of Calibration

Certificate No: 5511301QIL010123

(A) indicates out of tolerance condition

Test Type	Nominal	Tolerance-	Tolerance+	As Found	As Left	Unit
AC OUT/1kHz	1.000	0.950	1.050	1.001	1.001	VAC
Calibration	114.0	113.7	114.3	113.9	114.0	dB
Frequency	1000	980	1020	999	999	Hz

* indicates non accredited



3M Oconomowoc Personal Safety Division 3M Detection Solutions 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.3M.com/detection 262 567 9157 800 245 0779 262 567 4047 Fax

3M

Certificate of Calibration

Serial Number:

39850 1211 6388

Certificate No: 5511301BGK120021

Submitted By:	COUNTY OF SANTA CLARA DEH SA	ł
	1555 BERGER DR #300	
	SAN JOSE, CA 95112	

Serial Number:	BGK120021	Date Received:	4/16/2015
Customer ID:		Date Issued:	4/27/2015
Model:	SOUNDPRO DL-2 SLM	Valid Until:	4/27/2016
Test Conditions:		Model Conditions	:
Temperature:	18°C to 29°C	As Found:	OUT OF TOLERANCE
Humidity:	20% to 80%	As Left:	IN TOLERANCE
Barometric Pressure:	890 mbar to 1050 mbar		

SubAssemblies:

Description:

MICRO	PF	HONE	QE	7052	1/2	IN.	ELECTRET
TYPE	2	PREA	AMP				

Calibration Procedure: 53V899

Reference Standard(s):

I.D. Number	Device
EF000255	QUEST-CAL
ET0000556	B&K ENSEMBLE

 Last Calibration Date Calibration Due

 12/15/2014
 12/15/2015

 6/19/2014
 6/19/2015

Measurement Uncertainty:

+/- 2.2% ACOUSTIC (0.19DB) Estimated at 95% Confidence Level (k=2)

Calibrated By:	gore mon	4/27/2015	
caribrated by.	JOSEGORALES	Service Technician	
Reviewed/Approved By:	Technical Manager/I) Deputy	4/27/2015

This report certifies that all calibration equipment used in the test is traceable to NIST or other NMI, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of 3M Detection Solutions.



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Certificate of Calibration

Certificate No: 5511301BGK120021

(A) indicates out of tolerance condition

Test Type	Nominal	Tolerance-	Tolerance+		As Found	As Left	Unit
Linearity/30 to 120/114dB	114.0	113.8	114.2	A	114.5	114.1	dB
Linearity/20 to 110/104dB	104.0	103.8	104.2	A	104.5	104.1	dB
Linearity/10 to 100/94dB	94.0	93.7	94.3	А	94.6	94.2	dB
Linearity/0 to 90/84dB	84.0	83.6	84.4	A	84.6	84.2	dB
Linearity/-10 to 80/74dB	74.0	73.5	74.5	A	74.7	74.3	dB
A Weighting/125Hz	97.9	96.9	98.9		98.5	98.1	dB
A Weighting/250Hz	105.4	104.4	106.4		105.9	105.5	dB
A Weighting/500Hz	110.8	109.8	111.8		111.4	111.0	dB
A Weighting/1kHz	114.0	113.8	114.2	А	114.5	114.1	dB
A Weighting/2kHz	115.2	114.2	116.2		115.7	115.3	dB
C Weighting/31.62Hz	111.0	110.5	111.5		111.0	111.0	dB
C Weighting/7943Hz	111.0	110.5	111.5		110.9	110.9	dB
Z Weighting/10Hz	114.0	113.5	114.5		114.0	114.0	dB
Flat Response/19950Hz	114.0	113.7	114.3		113.7	113.7	dB

* indicates non accredited



098-393 Rev. B

An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory

ATTACHMENT 2

Path: Z:\Clients\ESP\LehighSouthw\85239_Lehigh\Studies\Tech_Consult\Second Sound Study\Report\Figures\Figure 4-2 Comparative Measurement Points.mxd irbrewe 10/12/2015 COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Source: Burns & McDonnell Engineering Company, Inc.

Path: Z:\Clients\ESP\LehighSouthw\85239_Lehigh\Studies\Tech_Consult\Second Sound Study\Report\Figures\Figure 4-3 Compliance Measurement Points.mxd irbrewe 10/12/2015 COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Source: Burns & McDonnell Engineering Company, Inc.

ATTACHMENT 3

12/17/2015

Information Panel

Name	Lehigh Cement-Lebanon Dr
Start Time	3/15/2015 4:04:37 AM
Stop Time	3/15/2015 5:04:37 AM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13D
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	34.9 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Logged Data Chart

Lehigh Cement-Lebanon Dr: Logged Data Chart



Date	Calibration Action	Level	<u>Cal. Model Type</u>	<u>Serial Number</u>	<u>Cert. Due Date</u>
3/15/2015 3:59:22 AM	Calibration	114.0			



12/17/2015

Information Panel

Name	Lehigh Cement-Stevens Creek BI near plant
Start Time	3/15/2015 5:34:56 AM
Stop Time	3/15/2015 6:34:56 AM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13D
Comments	

Summary Data Panel

Description	Meter	<u>Value</u>	Description	Meter	Value
Leq	1	54.8 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Logged Data Chart

Lehigh Cement-Stevens Creek Bl near plant: Logged Data Chart



<u>Date</u>	Calibration Action	Level	<u>Cal. Model Type</u>	<u>Serial Number</u>	<u>Cert. Due Date</u>
3/15/2015 5:33:01 AM	Calibration	114.0			



10/6/2015

Information Panel

Name	Lehigh Cement Noise Evaluation
Start Time	9/23/2015 3:05:26 PM
Stop Time	9/23/2015 3:20:38 PM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Unclear whether noise is from Lehigh Cement or Stevens Creek Quarry

Summary Data Panel

Description	<u>Meter</u>	Value	Description	Meter	<u>Value</u>
Leq	1	48.9 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Logged Data Chart

Near 15100 Montebello Road: Logged Data Chart



<u>Date</u>	Calibration Action	Level	<u>Cal. Model Type</u>	<u>Serial Number</u>	<u>Cert. Due Date</u>
9/23/2015 3:04:58 PM	Calibration	114.1			



10/6/2015

Information Panel

Name	Lehigh Cement Noise Evalulation
Start Time	10/3/2015 2:22:42 AM
Stop Time	10/3/2015 3:22:42 AM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Traffic and Cricket Noise, Lehigh Cement Plant Noise Audible

Logged Data Chart

Sycamore Drive Location #MP7: Logged Data Chart



Calibration History

<u>Date</u>	Calibration Action	Level	<u>Cal. Model Type</u>	<u>Serial Number</u>	<u>Cert. Due Date</u>
10/3/2015 2:14:55 AM	Calibration	114.0			
10/3/2015 3:24:05 AM	Verification	114.0			

Summary Data Panel

Description	Meter	Value	Description	<u>Meter</u>	<u>Value</u>
Leq	1	43.4 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	С
Response	2	FAST			



10/6/2015

Information Panel

Name	Lehigh Cement Plant Noise Evaluation
Start Time	10/3/2015 3:49:46 AM
Stop Time	10/3/2015 4:49:46 AM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Less Cricket and Traffic Noise, Lehigh Plant Noise Audible

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	41.7 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	С
Response	2	FAST			

Logged Data Chart

Canyon Oak Drive-Location #MP11: Logged Data Chart



<u>Date</u>	Calibration Action	Level	<u>Cal. Model Type</u>	<u>Serial Number</u>	<u>Cert. Due Date</u>
10/3/2015 3:48:37 AM	Calibration	114.0			
10/3/2015 4:50:53 AM	Verification	114.0			



10/13/2015

Information Panel

Name	Lehigh Cement-near Montebello Road-MP14
Start Time	10/11/2015 11:21:41 PM
Stop Time	10/12/2015 12:21:56 AM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Background noise: crickets-dominant noise; Lehigh Cement was audible; Noise spikes were due to occasional planes flying overhead and cars passing nearby.

Summary Data Panel

Description	<u>Meter</u>	Value	Description	<u>Meter</u>	Value
Leq	1	49.5 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	С
Response	2	FAST			

Logged Data Chart

Lehigh Cement-near 15100 Montebello Road-MP14: Logged Data Chart





10/13/2015

Information Panel

Name	Lehigh Cement Plant-uphill from Montebello Road-MP6
Start Time	10/12/2015 12:34:24 AM
Stop Time	10/12/2015 1:34:24 AM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Dominant noise was from crickets; Lehigh Plant noise was audible; occasional noise spikes were due to planes flying overhead

Summary Data Panel

Description	<u>Meter</u>	<u>Value</u>	Description	Meter	Value
Leq	1	45.6 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	С
Response	2	FAST			

Logged Data Chart

Lehigh Cement Plant-uphill from 15100 Montebello Road-MP6: Logged Data Chart



<u>Date</u>	-	Calibration Action	Level	<u>Cal. Model Type</u>	Serial Number	<u>Cert. Due Date</u>
10/12/2015 AM	12:32:24	Calibration	114.0			
10/12/2015 1:3	6:52 AM	Verification	114.0			



10/16/2015

Information Panel

Name	Lehigh Cement-Lebanon Drive
Start Time	10/15/2015 10:23:46 PM
Stop Time	10/15/2015 11:25:19 PM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Dominant noise was crickets with occasional cars and overhead plane flybys; Lehigh Cement Plant was barely audible

Summary Data Panel

Description	Meter	Value	Description	<u>Meter</u>	Value
Leq	1	39.9 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Logged Data Chart

Lebanon Drive; Cupertino, CA : Logged Data Chart



<u>Date</u>	Calibration Action	Level	<u>Cal. Model Type</u>	<u>Serial Number</u>	<u>Cert. Due Date</u>
10/15/2015 PM	10:19:57 Calibration	114.0			
10/15/2015	11:29:20 Verification	114.1			



PM



10/16/2015

Information Panel

Name	Lehigh Cement Plant-Ridgeway Drive; Cupertino, CA
Start Time	10/15/2015 11:46:18 PM
Stop Time	10/16/2015 12:46:18 AM
Device Name	BGK120021
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	Background noise was crickets and numerous truck and car traffic noise; Lehigh Cement Plant was audible but background noise was dominant.

Summary Data Panel

Description	<u>Meter</u>	<u>Value</u>	Description	Meter	Value
Leq	1	60.2 dB			
Exchange Rate	1	3 dB	Weighting	1	А
Response	1	FAST	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	С
Response	2	FAST			

Logged Data Chart

Ridgeway Drive; Cupertino, CA : Logged Data Chart



<u>Date</u>	Calibration Action	Level	<u>Cal. Model Type</u>	<u>Serial Number</u>	<u>Cert. Due Date</u>
10/15/2015 PM	11:44:48 Calibration	114.0			

