## INTEROFFICE CORRESPONDENCE Los Angeles Unified School District Office of Environmental Health and Safety

#### **INFORMATIVE**

### TO: Members, Board of Education Ramon C. Cortines, Superintendent

**DATE:** December 11, 2015

**FROM:** WROBERT Laughton, Director Office of Environmental Health and Safety

### SUBJECT: ALISO CANYON NATURAL GAS LEAK AIR MONITORING UPDATE

This is an update to the informative provided yesterday regarding the air monitoring activities being conducted at Porter Ranch Community School and Castlebay Lane Elementary School in response to the ongoing natural gas leak at the Aliso Canyon natural gas storage facility.

On December 9, 2015, real-time air monitors detected the presence of volatile organic compounds (VOCs) at both sites. Although the monitors can detect low levels, they are not able to identify specific compounds such as benzene. Because of the VOC detections, additional confirmation samples were collected on December 10, 2015 and sent to a laboratory for further analysis.

Laboratory results indicate that chemicals analyzed were either not detected or at concentrations below environmental regulatory limits. We have provided this information to the Los Angeles County Department of Public Health (LACDPH) for their review.

If you have any questions or require further information, please contact me at (213) 241-3199.

## INTEROFFICE CORRESPONDENCE Los Angeles Unified School District Office of Environmental Health and Safety

### **INFORMATIVE**

TO:	Members, Board of Education						
	Ramon C. Cortines, Superintendent						

DATE: December 10, 2015

Robert Laughton, Director Al for Plaughton FROM: Office of Environmental Health and Safety

#### SUBJECT: ALISO CANYON NATURAL GAS LEAK AIR MONITORING

This is an update regarding the air monitoring activities being conducted at Porter Ranch Community School and Castlebay Lane Elementary School in response to the ongoing natural gas leak at the Aliso Canyon natural gas storage facility.

Air samples are collected throughout the day utilizing real-time hand-held monitors to determine if there is a health threat. A field technician gathers samples from various locations around both campuses, both indoors and outdoors. The results are reported in parts per million (PPM) for methane (CH<sub>4</sub>) and hydrogen sulfide (H<sub>2</sub>S). Since Dec. 1, when we obtained the necessary equipment, we have also been testing for benzene, toluene, ethylbenzene and xylene. Real-time data instruments are utilized for screening purposes and to determine if additional investigation is required.

We also collect data through the use of air-sampling canisters. The stainless-steel canisters are placed at indoor locations around the schools, where they collect samples over an eight-hour period. The canisters are then sent to a laboratory for analysis. The lab analysis is able to identify the presence of specific compounds and concentrations. Real-time air monitoring samples between November 30, 2015 and December 8, 2015 have been below regulatory guidance levels. Air monitoring activities will continue for the immediate future.

On December 9, 2015, real-time air monitors detected the presence of volatile organic compounds (VOCs) at both sites. Although the monitors can detect low levels, they are not able to identify specific compounds such as benzene. Because of the VOC detections, additional confirmation samples were collected on December 10, 2015 and sent to a laboratory for further analysis. Lab results are expected tomorrow.

In a phone conference this morning, OEHS provided the VOC monitoring information to the Los Angeles County Department of Public Health (LACDPH) and advised of the additional confirmation sampling activities. LACDPH staff concurred with actions taken which include additional confirmation sampling activities. Analytical results will be provided to LACDPH for review and to determine if further action is necessary.

If you have any questions or require further information, please contact me at (213) 241-3199.



CLIEN	T: Los A	ngeles Uni	fied Schoo	ol District	DATE: 12/9/2015	PAGE 1 of 4			
ADDRESS: Castlebay Lane Elementary School BY: Mindy Rigney									
INSTRUMENT: Photo Ionization Detector (PID)									
CALIBRATION VALUE: 5.0 ppmv CALIBRATION READING: 5.0 ppmv									
INSTR	INSTRUMENT: Methane Flame Ionization Detector (FID)								
CALIE	CALIBRATION VALUE: <u>100 ppmv</u> CALIBRATION READING: <u>101 ppmv</u>								
INSTR	UMENT:	Hydrogen	Sulfide Jei	rome J631	<u>X</u>				
CALIE	BRATION	VALUE: N	N/A Factor	y Calibrat	ed CALIBRA	ATION R	EADING: <u>Manufacturer</u> Calib	ration Only	
		-		-					
TIME	Methane	Hydrogen Sulfide	VOCs* (ppmv)		Drager Tubes	1			
	(ppmv)	(ppmv)		Toluene (ppmv)	Ethylbenzene (ppmv)	Xylene (ppmv)	Locatio	n	
0844	0.0	0.000			East of Performing Arts Center		Arts Center		
1040	0.0	0.001	0.0		Southeast corner of field area				
1050	0.0	0.000	0.0		Lunch benches				
1058	0.0	0.001	0.0		Front of Room #27 (outdoors)				
1100	0.0	0.001	0.0		Hallway between K4 and Room1				
1142	0.0	0.000	0.0		Behind (west) of classroom #18				
1146	0.0	0.000	0.0				Hallway in front of	Classroom#7	
1148	0.0	0.000	0.0	Kindergarten playgroun		ayground			
1215				ND	ND	ND	Hallway in front o	f Room#14	
1400				ND ND ND Front of Performing Arts Center					
1410				ND	ND	ND	YMCA Clas	sroom	
1420	1420 0.000 0.0 YMCA Classroom								

Weather Conditions: <u>Partly Cloudy</u> Wind Speed: <u>1 mph</u>

Wind Dir: <u>northwest</u> Temp: <u>50° F (at 7 am) to 80° F (at 2pm)</u>

Comments: Toluene, Xylene and Ethylbenzene tested using dragger tubes.

ND = Not Detected

ppmv = parts per million by volume

N/A = Not Applicable

-- = No Reading (no measurement taken at this time)

Volatile Organic Compound (VOC) PID readings are +/- 10% \*VOC readings were previously reported as 'Benzene'. However, PID measures total VOCs and is not compound-specific. PID is a screening instrument and air samples were collected and submitted to laboratory on 24-hr rush turn-around-time.



CLIENT: Los Angeles Unified School District							DATE: 12/9/2015	PAGE 2 of 4		
ADDRESS: Castlebay Lane Elementary School BY: Mindy Rigney										
INSTR	INSTRUMENT: Photo Ionization Detector (PID)									
CALIBRATION VALUE: 5.0 ppmv CALIBRATION READING: 5.0 ppmv										
INSTR	INSTRUMENT: Methane Flame Ionization Detector (FID)									
CALIE	BRATION	VALUE: <u>1</u>	<u>00 ppmv</u>	CALIBR	RATION REAL	DING:	101 ppmv			
INSTR	UMENT:	Hydrogen	Sulfide Jei	rome J631	X					
CALIE	CALIBRATION VALUE: <u>N/A Factory Calibrated</u> CALIBRATION READING: <u>Manufacturer Calibration Only</u>									
TIME	Methane	Hydrogen	VOCs*	Drager Tubes						
TIME	(ppmv)	(ppmv)	(ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylene (ppmv)	Location			
1429	0.0	0.000	0.0		Main office hallway near bathroom					
1434	0.0	0.000	0.0	Outside classroom#34						
1550	0.0	0.000	0.0	Main Office						
1551			0.1	Nurse's room				1		
1552			0.1	Main office storage						
1553			0.0	Hallway outside Main Office						
1554			0.0	Room K3						
1557			0.0	Playground South end				1 end		
1558			0.0				Science roon	1		
1603			0.0	Main office						
1605			0.1				Main office hall	way		
1607	0.0 Outside Main Office Front of School									

Weather Conditions: <u>Partly Cloudy</u>

Wind Speed: <u>1-2 mph</u>

Wind Dir: <u>variable</u> Temp: <u>50° F (at 7 am) to 80° F (at 2pm)</u>

Comments: Toluene, Xylene and Ethylbenzene tested using dragger tubes.

ND = Not Detected

ppmv = parts per million by volume

N/A = Not Applicable

-- = No Reading (no measurement taken at this time)

Volatile Organic Compound (VOC) PID readings are +/- 10% \*VOC readings were previously reported as 'Benzene'. However, PID measures total VOCs and is not compound-specific. PID is a screening instrument and air samples were collected and submitted to laboratory on 24-hr rush turn-around-time.



CLIEN	NT: Los A	ngeles Uni	fied Schoo	ol District	DATE: 12/9/2015	PAGE 3 of 4				
ADDRESS: Castlebay Lane Elementary School BY: Mindy Rigney										
INSTRUMENT: Photo Ionization Detector (PID)										
CALIBRATION VALUE: 5.0 ppmv CALIBRATION READING: 5.0 ppmv										
INSTR	INSTRUMENT: Methane Flame Ionization Detector (FID)									
CALI	BRATION	VALUE: <u>1</u>	100 ppmv	CALIBR	RATION REAI	DING:	101 ppmv			
INSTR	RUMENT:	Hydrogen	Sulfide Jei	rome J631	X					
CALI	CALIBRATION VALUE: <u>N/A Factory Calibrated</u> CALIBRATION READING: <u>Manufacturer Calibration Only</u>									
TIME	Methane	Hydrogen Sulfide (ppmv)	VOCs*	Drager Tubes						
TIME	IME (ppmv)		(ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylene (ppmv)	Location			
1610			0.0		Outside by PAC					
1612			0.0		Room K3					
1614			0.0	YMCA Room						
1615			0.0	Girls bathroom by lunch tables						
1615	615 0.0 Lunch benches (outside)							side)		
1618			0.0	Inside PAC						
1620			0.1	Main office						
1625			0.0	Kindergarten playground						
1640	0.0	0.002	0.0	Lunch benches						
1644	0.0	0.002	0.0	Girls bathroom by lunch bench						
1647	647   0.0   0.003   0.0     Grass area in front of school									

Weather Conditions: <u>Partly Cloudy</u> Wind Speed: <u>1-2 mph</u>

Wind Dir: variable-mostly S-SW Temp: 75° F (at 4:50 pm)

Comments: Toluene, Xylene and Ethylbenzene tested using dragger tubes.

ND = Not Detected

ppmv = parts per million by volume

N/A = Not Applicable

-- = No Reading (no measurement taken at this time)

Volatile Organic Compound (VOC) readings are +/- 10%

\*VOC readings were previously reported as 'Benzene'. However, PID measures total VOCs and is not compound-specific. PID is a screening instrument and air samples were collected and submitted to laboratory on 24-hr rush turn-around-time.



CLIEN	VT: Los A ESS: Cast	ngeles Uni	fied Schoo Elementa	ol District ry School	DATE: 12/9/2015 BY: Mindy Rigney	PAGE 4 of 4				
ADDRESS: Castlebay Lane Elementary School BY: Mindy Rigney   INSTRUMENT: Photo Ionization Detector (PID) CALIBRATION VALUE:										
TIME	TIME Methane Hydroger Sulfide		VOCs*	Drager Tubes						
	(ppmv)	(ppmv)	(ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylene (ppmv)	Location			
1652		0.003	0.0				SW side of school outside K playground			
1730	0.0	0.002	0.0		YMCA Classroom					
1735	0.0	0.001	0.0		Hallway in front of Room #6					
1740	0.0	0.002	0.0		Front of PAC					

Weather Conditions: <u>Clear</u> Wind Speed: <u>1-2 mph</u>

Wind Dir: <u>south-southwest</u> Temp: <u>70° F</u>

Comments: Toluene, Xylene and Ethylbenzene tested using dragger tubes.

ND = Not Detected

ppmv = parts per million by volume

N/A = Not Applicable

--- = No Reading (no measurement taken at this time) \*Volatile Organic Compound (VOC) readings were previously reported as 'Benzene'. However, PID measures total VOCs and is not compound-specific. PID is a screening instrument and air samples were collected and submitted to laboratory on 24-hr rush turn-around-time.

VOC PID readings are +/- 10%