



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

December 20, 2013

Mr. Dave Matthews  
Apex Sanitary Landfill  
P.O. Box 157  
Amsterdam, OH 43903

Re: Apex Sanitary Landfill  
Notice of Violation  
MSWLF018772  
Municipal Solid Waste Landfills  
Jefferson County  
COM

**Subject: Notice of Violation,  
Offsite Odor Investigation of December 19, 2013**

Dear Mr. Matthews:

On December 19, 2013, in response to complaints regarding odors originating from Apex Sanitary Landfill (Apex), Ohio Environmental Protection Agency (Ohio EPA) conducted odor surveillance along public roads surrounding the facility. On this date, three (3) complaints were reported to the odor hotline for Apex Sanitary Landfill.

**OAC Rule 3745-27-19(B)(3)** states *"The owner or operator shall operate the facility in such a manner that noise, dust, and odors are strictly controlled so as not to cause a nuisance or a health hazard."*

When evaluating offsite odors, Ohio EPA uses the odor intensity table provided below.

Intensity	Descriptor
Not Detected (ND)	Landfill-related odor <b>Not Detectable</b> .
Fleeting (F)	Landfill-related odor present in the air, which is <b>faint</b> and detectable for a markedly brief period of time not lasting more than 10 seconds.
Detectable (D)	Landfill-related odor present in the air; however, odor intensity or offensiveness does not rise to the level of irritable or intolerable.
Irritable/Intolerable (I)	Landfill-related odor present in the air, which is <b>irritating or intolerable</b> for any length of time and causes a person to attempt to avoid it completely.

Odor surveillance was conducted by Ohio EPA on December 19, 2013, beginning at 11:12 am and ending at 12:43 pm, and totaled 91 minutes. Multiple Ohio EPA staff participated during the odor surveillance so that odor intensity and duration could be reaffirmed. A Jerome J605 Hydrogen Sulfide Analyzer was used to measure hydrogen sulfide gas. Brandon, a member of Apex's Odor Complaint Response Team, accompanied Ohio EPA staff during the entire surveillance period, and odor detections were confirmed in each instance identified on the attached field notes.

Detectable landfill gas odors were present along Township Road 267 northeast of the landfill during the odor monitoring event, and odor location correlated with the prevailing wind direction. On average, more than nineteen (19) minutes of detectable odor was present per hour of surveillance. Due to the presence of these offsite landfill odors, Apex has failed to strictly control odors as required by rule and, therefore, is in violation of OAC Rule 3745-27-19(B)(3).

Following the odor surveillance, an exit conference was held between you and Joe Tatarek, Apex Environmental, and Craig Walkenspaw and I, Ohio EPA Southeast District Office, to discuss the findings and steps taken by Apex to control odors. Odor control equipment was not in use during the time when Ohio EPA performed odor monitoring, and Apex was unable to mobilize equipment due to frozen deodorizing agent and mechanical failures. It is critical that Apex proactively identify sources that are likely to generate odors that may migrate offsite and deploy operable odor control equipment and other measures that effectively contain and control odors.

Ohio EPA expects Apex to immediately take the necessary measures to return to compliance with Ohio's environmental laws. Within fourteen (14) days of receipt of this letter, Apex is requested to provide documentation to this office including the steps taken to abate the violations cited above. Documentation of the steps taken to return to compliance includes written correspondence, updated policies and photographs, as appropriate, and may be submitted via the postal service or electronically to [rich.fox@epa.ohio.gov](mailto:rich.fox@epa.ohio.gov).

After conducting odor surveillance on December 19, 2013, Ohio EPA performed surface scans for hydrogen sulfide in areas where intermediate covers had been placed on amassed waste. Ohio EPA staff detected intense hydrogen sulfide odors in distinct areas where intermediate cover had been placed. As summarized below, Ohio EPA measured hydrogen sulfide gas at the identified locations:

Time	Location	H2S (ppb)
2:45	Lower South Bench (from east to west)	3.27
2:47		68.99
2:49		24.78
2:51		35.02
2:52		4.07
2:53		214*
2:55		56.76*
3:10		Upper South Bench (from west to east)
3:12	11.17	
3:13	6.84	
3:14	4.78	
3:15	"high conc"***	
3:16	37.84**	
3:17	90.84	
3:18	20.69	
3:19	43.86	

\* same location resampled

\*\*reading from J605 Hydrogen Sulfide Meter (same location resampled)

During the collection of hydrogen sulfide data on December 19, 2013, Ohio EPA observed significant amounts of rock and rock fragments (mine spoil) used as intermediate cover. As required by rule, intermediate and transitional covers must have **low permeability** to water, good **compactability**, **cohesiveness**, and relatively **uniform texture**, and **shall not contain large objects**. In addition, this soil cover must be of required thickness, consisting of **well-compacted loam, silt loam, clay loam, silt clay loam, silt clay**, or a combination of these soil types. Apex has scheduled a site visit with Ohio EPA during the week of January 6, 2014, to dig test pits and evaluate intermediate cover material to ensure compliance with OAC Rule 3745-27-19(G). In the interim, please apply at least six inches of screened soil to areas where hydrogen sulfide concentrations were measured above 20 ppb. In addition, please apply at least six inches of screened soil to areas where methane concentrations are measured above 250 ppm during required surface scans.

The working face was observed while collecting hydrogen sulfide data, and daily planned contours had been reached along the northern portion of the working face earlier in the day; however, daily cover had not been fully applied. During the odor surveillance performed on December 19, 2013, the predominant odor type detected was working face odor. It is critical that daily cover be applied as soon as practicable after planned daily contours are reached. Given the twenty-four (24) hour operations at the landfill, please include a procedure for the frequent evaluation of deposited wastes at the working face and prompt application of daily cover after planned daily contours are reached. In addition, as required by rule, please ensure the unloading of waste materials is confined to the smallest practical area.

Please be advised that violations cited above will continue until the violations have been properly abated. Failure to comply with Chapter 3734 of the Ohio Revised Code and rules promulgated thereunder may result in a civil penalty of up to \$10,000 per day for each violation. It is imperative that you return to compliance. If circumstances delay the abatement of violations, Apex is requested to submit written correspondence of the steps that will be taken by date certain to attain compliance.

If you have any questions regarding this notice, I may be contacted by telephone at (740) 380-5213 or by email at [joe.goicochea@epa.ohio.gov](mailto:joe.goicochea@epa.ohio.gov).

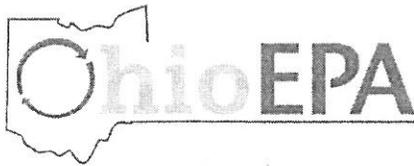
Sincerely,



Joe Goicochea  
Environmental Manager  
Division of Materials and Waste Management

JG/cb

ec: Jefferson County General Health District  
Anthony Rizzo, Environmental Logistics Services  
Aaron Shear, CO-DMWM



Division of Materials and Waste Management  
Odor Surveillance Form

Facility Name: APEX Inspector Name: CRICK & JOE Date: 12/19/2013

Weather Conditions	Clear	Partly Cloudy	Mostly Cloudy	Overcast	Hazy
Precipitation	None	Fog	Rain	Sleet	Snow
Direction Wind is From	N	NW	W	SW	S SE E NE
Wind Speed	Calm	1 - 5 mph	5 - 15 mph	15 - higher	

Temperature: 48 °F Relative Humidity: 61 % Barometric Pressure: 30.1 inches Hg  
Is a printout of weather data attached? no What is the source of the data? weather underground

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TIME (EST.)	LOCATION	ODOR INTENSITY	DURATION	DESCRIPTORS	H <sub>2</sub> S ppb	COMMENTS
1112	8	ND			0	
1120	8.5	D	3 min	H <sub>2</sub> S / MSW	4.80	ppb
1125	8.5	ND			0	
1128	9	D	3 min	MSW	4.25	ppb
1130	9	D	2 min		5.53	ppb
1132	9	D	2 min		3.16	ppb
1134	9	D	1 min		4.33	ppb
1135	9	D	2 min		5.66	ppb
1138	9	D	n/a changed location		3.71	ppb
1142	Between 8/11	D	3 min		5.45	ppb

Location should be an address, GPS coordinates, or specific position (e.g. 20 yds North of Main St. & Wall St. intersection)  
When applicable, include Hydrogen Sulfide readings (ppb or ppm) in comments section.

TIME (EST)	LOCATION	ODOR INTENSITY	DURATION	DESCRIPTORS	COMMENTS
11:45	Between 9/11	D	3 min		6.25 ppb
11:48	Between 9/11	D	n/a changed location		3.72 ppb
11:52	12	ND			0
11:54	12	ND			0
11:56	12	ND			0
12:03	12	ND			0
12:07	10.5	ND			0
12:13	8	ND			0
12:14	8.5	ND			0
12:16	8.5	ND			0
12:19	8.5	D	2 min	MSW	4.50 ppb
12:21	8.5	D	talk to resident	MSW	3.44 ppb
12:23	8.5	ND	---		0
12:25	9	ND			0
12:27	9	ND			0
12:29	9	F	< 10 sec	MSW	3.71 ppb
12:34	9	F	< 10 sec	MSW	3.76 ppb
12:35	9	D	2 min	MSW	5.39 ppb
12:37	9	D	1 min	MSW	4.71 ppb
12:38	9	D	1 min	MSW	4.18 ppb
12:39	9	D	2 min	MSW	3.58 ppb
12:41	9	D	2 min	MSW	3.69 ppb
12:43	9	D	end	MSW	3.43 ppb

Offsite odors detected by inspector were determined to be emanating from the facility.

12/19/13

Date/Time

Joe Gracchia

Inspector's Name (printed)

Joe Gracchia

Signature

# Apex Landfill - Odor Monitoring Points

