



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

September 20, 2013

RE: JEFFERSON COUNTY
FAC – APEX SANITARY LANDFILL
COM

Apex Environmental, LLC
Dave Matthews, General Manager
P.O. Box 157
Amsterdam, OH 43903

**Subject: Notice of Compliance,
Offsite Odor Investigations (July 30, 2013 through September 5, 2013)**

Dear Mr. Matthews:

From July 30 to September 5, 2013, in response to complaints regarding odors originating from Apex Sanitary Landfill (Apex), Ohio Environmental Protection Agency (Ohio EPA) and Jefferson County General Health District (JCGHD) conducted an extended odor surveillance along public roads surrounding the facility. During this time period, 241 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 Not Detectable .
Fleeting (F)	Landfill-related odor present in the air, which is faint 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 irritating or intolerable for any length of time and causes a person to attempt to avoid it completely.

Odor surveillance was conducted by Ohio EPA on four occasions: July 30, August 14, August 22, and September 5. Multiple Ohio EPA and JCGHD staff participated during

the odor surveillance so that odor intensity and duration could be reaffirmed. Each odor monitoring event lasted a minimum of 1.5 hours in duration. In addition, JCGHD staff independently conducted odor surveillance on three occasions: August 18, August 22, and August 27.

Detectable landfill gas odors were present along Township Road 267 north of the landfill and Township Road 266 and State Route 43 east of the landfill during the odor monitoring events, and odor locations correlated with the prevailing wind direction. On average, less than one (1) minute of detectable odor was present per hour of surveillance. At the time of the odor surveillance events, Apex Sanitary Landfill was found to be in compliance with Ohio Administrative Code (OAC) Rule 3745-27-19(B)(3).

After conducting odor surveillance on September 5, 2013, Ohio EPA and JCGHD staff performed surface scans for hydrogen sulfide in areas where intermediate and transitional covers had been placed on amassed waste. Ohio EPA and JCGHD staff detected intense hydrogen sulfide odors primarily in areas where intermediate cover had been placed. As summarized below, Ohio EPA measured hydrogen sulfide gas at the identified locations:

Time	Latitude	Longitude	H2S (ppb)
11:44	40-25.924'	80-54.925'	3.64
11:48	40-25.921'	80-54.897'	4.22
11:51	40-25.918'	80-54.889'	7.99
11:53	40-25.913'	80-54.869'	77.06
11:55	40-25.909'	80-54.857'	4.22
11:57	40-25.906'	80-54.846'	18.91
11:59	40-25.901'	80-54.832'	84.05
12:06	40-25.895'	80-54.813'	85.68
12:09	40-25.905'	80-54.780'	82.34
12:15	40-25.935'	80-54.807'	65.97
12:16	40-25.939'	80-54.812'	19.57
12:18	40-25.945'	80-54.822'	52.44
12:22	40-25.976'	80-54.783'	68.20
12:24	40-25.016'	80-54.728'	227.00
12:28	40-25.030'	80-54.673'	13.81
12:31	40-25.061'	80-54.654'	3.81
12:35	40-25.103'	80-54.635'	5.95
12:38	40-25.126'	80-54.708'	3.12
12:45	40-25.048'	80-54.855'	0
12:52	40-25.909'	80-54.915'	0

In an email dated September 6, 2013, Ohio EPA requested that you overlay the data in the table above into the August 2013 surface scan performed by Apex Environmental, LLC. The August 2013 monthly scan revealed locations where methane was measured above 250 and 500 parts per million (ppm). To date, Ohio EPA has not received the requested map. Within fourteen (14) days of receipt of this letter, please forward the map electronically to rich.fox@epa.ohio.gov. In addition, please notify me at least five (5) days prior to the next monthly surface scan so that Ohio EPA staff can participate and collect additional hydrogen sulfide data in these areas of the landfill.

During the collection of hydrogen sulfide data on September 5, 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 **compatibility**, **cohesiveness**, and relatively **uniform texture**, and **shall not contain large objects in such quantities as may interfere with its application and intended purpose**. In addition, this soil cover must be of required thickness, consisting of **well-compacted loam**, **silt loam**, **clay loam**, **silty clay loam**, **silty clay**, or a combination of these soil types. Within fourteen (14) days of receipt of this letter, please provide a written response that describes how the material used as transitional and intermediate covers at the facility satisfy each element contained within OAC Rule 3745-27-08(D)(19) and OAC Rule 3745-27-19(G).

If you have any questions regarding this notice, I may be contacted at by telephone at (740) 380-5441 or by email address noted above.

Sincerely,



Richard Fox, R.S.
Environmental Supervisor
Division of Materials and Waste Management

RF/mr

cc: Jefferson County General Health District
Aaron Shear, CO-DMWM
Dale Warner, SEDO-DMWM