December 24, 2019
File No. 02219702.00

Mr. Tom Farrell, Manager
Division of Solid Waste Enforcement
New Jersey Department of Environmental Protection
9 Ewing Street
Trenton, New Jersey 08625-0420

Mr. Jeffrey Meyer, Manager
Division of Air Enforcement
Bureau of Air Compliance and Enforcement
New Jersey Department of Environmental Protection
7 Ridgedale Avenue
Cedar Knolls, New Jersey 07927

Subject: December 22, 23 and 24, 2019 Monitoring Station Data
Keegan Landfill
New Jersey Sports and Exposition Authority
Permit Activity Number: EIP190003
EA ID#: NEA 190001-13317

Dear Mr. Farrell and Mr. Meyer:

On December 22, 23, and 24, 2019, NEXA, on behalf of the New Jersey Sports and Exposition Authority (NJSEA), notified the NJDEP hotline (1-877-WARNDEP) via phone that hydrogen sulfide (H_2S) gas measurements in excess of 30 ppb over a 30-minute period (rolling averages) were recorded at monitoring stations MS-1 and MS-2 at the Keegan Landfill (see Attachment 1). NJSEA made these notifications, as required under the NJDEP-approved Monitoring Action Plan and Reference #11 of the subject Permit, for raw data collected from MS-1 and MS-2 on December 22, 23, and 24, 2019 (see Attachment 2). We provide discussion and analysis of the data recorded at MS-1 and MS-2 below.

MONITORING STATION MS-1

The 30-minute rolling average H_2S concentration at Monitoring Station MS-1 was in excess of 30 ppb for intermittent periods between 12:51 am and 9:27 am on December 23 (see NEXA notifications in Attachment 1 and raw data in Attachment 2). The hydrogen sulfide concentration, wind speed and wind direction measured at the period of the exceedance are provided in Attachment 3. The wind speed and wind direction was 1.7 mph and 211 degrees (i.e., from the southwest). The wind direction and MS-1 are shown on a map of the site. The nearest potential receptor is approximately 2,500 feet from the monitoring station (see Attachment 4).

The 30-minute rolling average H_2S concentration at Monitoring Station MS-1 was also in excess of 30 ppb between 9:12 pm on December 23 and 12:24 am on December 24 (see NEXA notifications in Attachment 1 and raw data in Attachment 2). The hydrogen sulfide concentration, wind speed and wind direction measured at the period of the exceedance are provided in Attachment 3. The wind speed and wind direction was 2.4 mph and 194 degrees (i.e., from the south). The wind direction and MS-1 are shown on a map of the site. The nearest potential receptor is approximately 2,000 feet from the monitoring station (see Attachment 4).

MONITORING STATION MS-2

The 30-minute rolling average H_2S concentration at Monitoring Station MS-2 was in excess of 30 ppb for intermittent periods between 6:45 pm on December 22 and 5:24 am on December 23 (see NEXA notifications in Attachment 1 and raw data in Attachment 2). The hydrogen sulfide concentration, average wind speed and wind direction measured during the period of the exceedances are provided in Attachment 3. The average wind speed and wind direction was 1.2 mph and 238 degrees (i.e., from the southwest). The wind direction and MS-2 are shown on a map of the site. The nearest potential receptor is approximately 3,000 feet from the monitoring station (see Attachment 4).

The 30-minute rolling average H_2S concentration at Monitoring Station MS-2 was also in excess of 30 ppb for intermittent periods between 8:15 pm on December 23 and 12:39 am on December 24 (see NEXA notifications in Attachment 1 and raw data in Attachment 2). The hydrogen sulfide concentration, average wind speed and wind direction measured during the period of the exceedances are provided in Attachment 3. The average wind speed and wind direction was 2.0 mph and 212 degrees (i.e., from the southwest). The wind direction and MS-2 are shown on a map of the site. The nearest potential receptor is approximately 2,500 feet from the monitoring station (see Attachment 4).

The cause of the emissions from Monitoring Stations MS-1 and MS-2 appears to be uncontrolled emissions from the Landfill. There was no corrective action implemented in accordance with the Odor Control Plan as the exceedances returned to less than 30 ppb by the morning on each day.

The landfill gas collection and control system (GCCS) installation is complete and commenced operation on September 5, 2019. The GCCS is being continuously monitored and adjusted to ensure efficient collection of landfill gas and to address specific exceedances at the monitoring stations. Additionally, a new permit was issued on December 23, including a second interim flare and an expansion of the GCCS on the eastern side of the Landfill. Construction of the expansion and the installation of the second interim flare is expected to commence mid-January 2020.

Please call either of the undersigned with any questions or comments.

Sincerely,

Christine H. Stokes
Project Manager
SCS Engineers

Lisa K. Wilkinson, PE
Project Director
SCS Engineers

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