

October 15, 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: October 14, 2019 Monitoring Station Data
 Keegan Landfill
 New Jersey Sports and Exposition Authority
 Permit Activity Number: EIP190001
 EA ID#: NEA 190001-13317

Dear Mr. Farrell and Mr. Meyer:

On October 14, 2019, SCS Engineers, on behalf of the New Jersey Sports and Exposition Authority (NJSEA), notified the NJDEP hotline (1-877-WARNDEP) via phone that hydrogen sulfide (H₂S) gas measurements in excess of 30 ppb over a 30-minute period (rolling averages) were recorded at monitoring station 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-2 on October 14, 2019 (see Attachment 2). We provide discussion and analysis of the data recorded at MS-2 below.

MONITORING STATION MS-2

The 30-minute rolling average H₂S concentration at Monitoring Station MS-2 was in excess of 30 ppb between 5:48 am and 6:00 am on October 14, 2019 (see 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 1.1 mph and 237 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 cause of the emissions from Monitoring Station 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 overnight exceedances returned to less than 30 ppb within less than a half hour.



October 15, 2019

Page 2

The landfill gas collection and control system (GCCS) installation is complete and commenced operation on September 5, 2019. During the initial operation period of the GCCS, the system is being continuously monitored and adjusted. It will take time to balance the system to ensure efficient collection of landfill gas and to address specific exceedances at the monitoring stations.

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

cc: G. Lugo, NJDEP (electronic copy)
A. Fontana, NJDEP (electronic copy)
T. Marturano, NJSEA (electronic copy)
A. Levy, NJSEA (electronic copy)
C. Sanz, NJSEA (electronic copy)
J. Stewart, Lowenstein (electronic copy)
G. Castano, Castano Quigley (electronic copy)
L. Lim, NJDEP (electronic copy)
B. Farbanish, NJDEP (electronic copy)
J. Mattessich, NJDEP (electronic copy)

Attachment 1

October 14, 2019
File No. 02219702.00

Summary of NJDEP Hotline Notification – 1-877-927-6337

- I. Reporter Information
 - a. Christine Stokes, 845-918-5219
 - b. SCS Engineers, 4 Executive Boulevard, Suffern, NY 10901

- II. Facility Information
 - a. Responsible Party: New Jersey Sports & Exposition Authority
 - b. Address: One DeKorte Park Plaza, Lyndhurst, NJ 07071
 - c. Facility Contact and phone: Tom Marturano, 201-460-4613
 - d. Facility Name: Keegan Landfill
 - e. Program Interest Number: 13317
 - f. Permit Number: EIP190001
 - g. Facility Location: 437 Bergen Ave, Kearny, NJ 07032

- III. Incident Information
 - a. Date and time of occurrence: From 5:48 am to 6:00 am on October 14, 2019.
 - b. Log # from DEP line: 19-10-14-1240-18 (opening and closing) Operator 69 (call made at approximately 12:30 pm on October 14, 2019).
 - c. Hydrogen sulfide gas measurement exceeding the limit of 30 ppb for 30 minutes at Monitoring Station MS-2 with maximum concentration of 33.7 ppb between 5:48 am and 6:00 am on October 14.



Attachment 2

**Hydrogen Sulfide Concentrations
Monitoring Station MS-2
Keegan Landfill**

Date & Time	H ₂ S Concentration (ppb)	Rolling 30 Minute Average (ppb)
10/14/2019 2:01	5	
10/14/2019 2:07	4	
10/14/2019 2:13	4	
10/14/2019 2:19	4	
10/14/2019 2:24	4	
10/14/2019 2:30	3	4.0
10/14/2019 2:36	3	3.7
10/14/2019 2:42	3	3.5
10/14/2019 2:47	3	3.3
10/14/2019 2:53	3	3.2
10/14/2019 2:59	3	3.0
10/14/2019 3:05	3	3.0
10/14/2019 3:10	3	3.0
10/14/2019 3:16	3	3.0
10/14/2019 3:22	3	3.0
10/14/2019 3:28	3	3.0
10/14/2019 3:33	4	3.2
10/14/2019 3:39	5	3.5
10/14/2019 3:45	5	3.8
10/14/2019 3:51	5	4.2
10/14/2019 3:56	5	4.5
10/14/2019 4:02	5	4.8
10/14/2019 4:08	5	5.0
10/14/2019 4:14	6	5.2
10/14/2019 4:19	4	5.0
10/14/2019 4:25	4	4.8
10/14/2019 4:31	4	4.7
10/14/2019 4:37	4	4.5
10/14/2019 4:42	4	4.3
10/14/2019 4:48	4	4.0
10/14/2019 4:54	5	4.2
10/14/2019 5:00	6	4.5
10/14/2019 5:05	9	5.3
10/14/2019 5:11	9	6.2
10/14/2019 5:17	14	7.8
10/14/2019 5:23	14	9.5
10/14/2019 5:28	40	15.3
10/14/2019 5:34	47	22.2
10/14/2019 5:40	47	28.5

**Hydrogen Sulfide Concentrations
Monitoring Station MS-2
Keegan Landfill**

Date & Time	H ₂ S Concentration (ppb)	Rolling 30 Minute Average (ppb)
10/14/2019 5:46	40	33.7
10/14/2019 5:51	10	33.0
10/14/2019 5:57	8	32.0
10/14/2019 6:03	4	26.0
10/14/2019 6:09	2	18.5
10/14/2019 6:14	2	11.0
10/14/2019 6:20	2	4.7
10/14/2019 6:26	2	3.3
10/14/2019 6:32	3	2.5
10/14/2019 6:37	6	2.8
10/14/2019 6:43	6	3.5
10/14/2019 6:49	6	4.2
10/14/2019 6:55	6	4.8
10/14/2019 7:00	6	5.5
10/14/2019 7:06	5	5.8
10/14/2019 7:12	5	5.7
10/14/2019 7:18	3	5.2
10/14/2019 7:23	3	4.7
10/14/2019 7:29	3	4.2
10/14/2019 7:35	2	3.5
10/14/2019 7:41	2	3.0
10/14/2019 7:46	3	2.7
10/14/2019 7:52	3	2.7
10/14/2019 7:58	3	2.7
10/14/2019 8:04	3	2.7
10/14/2019 8:09	3	2.8
10/14/2019 8:15	2	2.8
10/14/2019 8:21	2	2.7
10/14/2019 8:27	2	2.5
10/14/2019 8:32	2	2.3
10/14/2019 8:38	2	2.2
10/14/2019 8:44	1	1.8
10/14/2019 8:50	1	1.7
10/14/2019 8:55	1	1.5
10/14/2019 9:01	1	1.3
10/14/2019 9:07	1	1.2
10/14/2019 9:13	1	1.0
10/14/2019 9:18	1	1.0
10/14/2019 9:24	0	0.8

**Hydrogen Sulfide Concentrations
Monitoring Station MS-2
Keegan Landfill**

Date & Time	H ₂ S Concentration (ppb)	Rolling 30 Minute Average (ppb)
10/14/2019 9:30	1	0.8
10/14/2019 9:36	1	0.8
10/14/2019 9:41	1	0.8
10/14/2019 9:47	1	0.8
10/14/2019 9:53	3	1.2
10/14/2019 9:59	3	1.7

Attachment 3

Daily H ₂ S Readings at MS2 - Keegan Landfill Monitoring			
Date/Time	MS-2 -- Hydrogen Sulfide (ppb)	Wind Speed (mph)	Wind Direction
10/14/19 0:01	4	0.6	S
10/14/19 0:06	4	0.5	S
10/14/19 0:12	4	1.1	WSW
10/14/19 0:18	4	0.8	S
10/14/19 0:24	4	0.4	SW
10/14/19 0:29	4	0.7	WSW
10/14/19 0:35	6	1.0	SW
10/14/19 0:41	6	0.9	S
10/14/19 0:47	4	1.2	SSE
10/14/19 0:52	3	0.7	WSW
10/14/19 0:58	3	0.8	WSW
10/14/19 1:04	2	0.4	SSE
10/14/19 1:10	2	0.9	SW
10/14/19 1:15	2	0.7	SW
10/14/19 1:21	3	0.6	S
10/14/19 1:27	3	0.4	WSW
10/14/19 1:33	4	0.2	SSW
10/14/19 1:38	6	0.8	W
10/14/19 1:44	5	0.4	E
10/14/19 1:50	5	0.6	SW
10/14/19 1:56	5	0.6	S
10/14/19 2:01	5	0.4	W
10/14/19 2:07	4	0.4	SSW
10/14/19 2:13	4	0.6	WSW
10/14/19 2:19	4	0.8	SSE
10/14/19 2:24	4	0.8	W
10/14/19 2:30	3	0.3	NNW
10/14/19 2:36	3	0.7	S
10/14/19 2:42	3	0.3	E
10/14/19 2:47	3	1.2	W
10/14/19 2:53	3	0.5	SW
10/14/19 2:59	3	0.5	SW
10/14/19 3:05	3	0.5	NNW
10/14/19 3:10	3	0.6	W
10/14/19 3:16	3	0.4	SSW
10/14/19 3:22	3	0.6	WSW
10/14/19 3:28	3	0.8	SSE
10/14/19 3:33	4	0.9	WSW
10/14/19 3:39	5	0.8	SE
10/14/19 3:45	5	0.3	SSE
10/14/19 3:51	5	1.4	ESE
10/14/19 3:56	5	1.0	WSW
10/14/19 4:02	5	1.3	E
10/14/19 4:08	5	1.0	W

NOTE: Wind Direction reported in the direction that the wind is coming from

10/14/19 4:14	6	0.8	W
10/14/19 4:19	4	1.7	W
10/14/19 4:25	4	0.6	WSW
10/14/19 4:31	4	0.5	SSW
10/14/19 4:37	4	0.5	W
10/14/19 4:42	4	0.9	SSE
10/14/19 4:48	4	0.4	SSW
10/14/19 4:54	5	0.5	SE
10/14/19 5:00	6	0.9	SW
10/14/19 5:05	9	1.5	W
10/14/19 5:11	9	0.6	W
10/14/19 5:17	14	1.4	W
10/14/19 5:23	14	1.0	WSW
10/14/19 5:28	40	1.2	S
10/14/19 5:34	47	1.3	S
10/14/19 5:40	47	0.9	WSW
10/14/19 5:46	40	0.5	SW
10/14/19 5:51	10	0.8	SSW
10/14/19 5:57	8	1.6	SW
10/14/19 6:03	4	1.2	WSW
10/14/19 6:09	2	1.2	SW
10/14/19 6:14	2	1.3	SSW
10/14/19 6:20	2	1.0	WSW
10/14/19 6:26	2	1.3	W
10/14/19 6:32	3	0.9	NW
10/14/19 6:37	6	1.4	SW
10/14/19 6:43	6	0.6	SW
10/14/19 6:49	6	1.5	W
10/14/19 6:55	6	1.4	W
10/14/19 7:00	6	1.0	W
10/14/19 7:06	5	1.8	W
10/14/19 7:12	5	1.3	W
10/14/19 7:18	3	2.0	W
10/14/19 7:23	3	1.7	WSW
10/14/19 7:29	3	0.5	W
10/14/19 7:35	2	0.4	W
10/14/19 7:41	2	0.3	WNW
10/14/19 7:46	3	0.4	W
10/14/19 7:52	3	0.3	NNE
10/14/19 7:58	3	0.8	WSW
10/14/19 8:04	3	1.5	W
10/14/19 8:09	3	0.6	WSW
10/14/19 8:15	2	1.0	NNW
10/14/19 8:21	2	0.8	WNW
10/14/19 8:27	2	1.2	NNW
10/14/19 8:32	2	0.7	NW
10/14/19 8:38	2	1.3	W

NOTE: Wind Direction reported in the direction that the wind is coming from

10/14/19 8:44	1	0.8	N
10/14/19 8:50	1	1.4	WNW
10/14/19 8:55	1	1.9	W
10/14/19 9:01	1	1.7	NW
10/14/19 9:07	1	2.5	WNW
10/14/19 9:13	1	3.8	WNW
10/14/19 9:18	1	3.1	WSW
10/14/19 9:24	0	3.0	W
10/14/19 9:30	1	2.6	WNW
10/14/19 9:36	1	2.6	W
10/14/19 9:41	1	5.0	W
10/14/19 9:47	1	2.7	WNW
10/14/19 9:53	3	3.0	WNW
10/14/19 9:59	3	4.7	W
10/14/19 10:04	2	3.2	WNW
10/14/19 10:10	2	3.2	W
10/14/19 10:16	2	4.1	W
10/14/19 10:22	1	4.6	W
10/14/19 10:27	1	1.6	WNW
10/14/19 10:33	1	1.7	W
10/14/19 10:39	1	3.8	S
10/14/19 10:45	1	2.5	SSW
10/14/19 10:50	4	3.6	WSW
10/14/19 10:56	4	3.3	W
10/14/19 11:02	4	4.7	W
10/14/19 11:08	3	1.9	W
10/14/19 11:13	2	1.9	N
10/14/19 11:19	2	5.4	W
10/14/19 11:25	2	2.3	WSW
10/14/19 11:31	1	4.5	WSW
10/14/19 11:36	2	5.0	W
10/14/19 11:42	3	3.7	W
10/14/19 11:48	3	4.0	W
10/14/19 11:54	3	2.2	WNW
10/14/19 11:59	3	1.9	ENE
10/14/19 12:05	2	3.4	WSW
10/14/19 12:11	1	3.9	WNW
10/14/19 12:17	2	3.9	W
10/14/19 12:22	1	5.7	W
10/14/19 12:28	1	3.3	WNW
10/14/19 12:34	1	3.6	W
10/14/19 12:40	2	3.6	W
10/14/19 12:45	2	2.7	WSW
10/14/19 12:51	3	5.3	W
10/14/19 12:57	3	4.7	W
10/14/19 13:03	3	6.1	W
10/14/19 13:08	3	5.1	W

NOTE: Wind Direction reported in the direction that the wind is coming from

10/14/19 13:14	2	4.9	W
10/14/19 13:20	2	5.4	WSW
10/14/19 13:26	2	6.1	W
10/14/19 13:31	3	5.4	W
10/14/19 13:37	3	5.8	W
10/14/19 13:43	3	3.2	WSW
10/14/19 13:49	1	6.3	W
10/14/19 13:54	1	7.5	W
10/14/19 14:00	1	3.9	WNW
10/14/19 14:06	2	4.4	W
10/14/19 14:12	4	5.5	W
10/14/19 14:17	4	5.1	WNW
10/14/19 14:23	3	5.7	W
10/14/19 14:29	2	3.1	WNW
10/14/19 14:35	2	2.9	NW
10/14/19 14:40	2	5.7	W
10/14/19 14:46	2	6.0	W
10/14/19 14:52	2	7.2	W
10/14/19 14:58	2	2.8	WNW
10/14/19 15:03	2	7.9	W
10/14/19 15:09	2	3.5	W
10/14/19 15:15	2	4.9	W
10/14/19 15:21	2	5.0	SW
10/14/19 15:26	1	6.3	W
10/14/19 15:32	1	6.5	W
10/14/19 15:38	1	6.5	WSW
10/14/19 15:44	4	7.1	W
10/14/19 15:49	2	8.6	W
10/14/19 15:55	4	7.0	W
10/14/19 16:01	4	9.1	W
10/14/19 16:07	4	8.7	W
10/14/19 16:12	4	6.8	W
10/14/19 16:18	4	4.9	W
10/14/19 16:24	4	7.3	W
10/14/19 16:30	3	6.9	WNW
10/14/19 16:35	3	7.1	W
10/14/19 16:41	3	5.2	W
10/14/19 16:47	4	6.6	W
10/14/19 16:53	4	5.9	W
10/14/19 16:58	5	6.3	W
10/14/19 17:04	5	6.9	W
10/14/19 17:10	5	6.3	W
10/14/19 17:16	5	7.3	W
10/14/19 17:21	3	6.3	W
10/14/19 17:27	3	5.6	W
10/14/19 17:33	3	5.5	W
10/14/19 17:39	3	5.2	W

NOTE: Wind Direction reported in the direction that the wind is coming from

10/14/19 17:44	3	4.9	W
10/14/19 17:50	3	5.3	W
10/14/19 17:56	3	4.6	W
10/14/19 18:02	3	4.8	W
10/14/19 18:07	2	2.6	W
10/14/19 18:13	3	4.0	W
10/14/19 18:19	2	3.4	W
10/14/19 18:25	2	4.5	W
10/14/19 18:30	3	4.3	W
10/14/19 18:36	5	3.3	W
10/14/19 18:42	6	2.7	W
10/14/19 18:48	6	4.4	W
10/14/19 18:53	6	4.3	W
10/14/19 18:59	6	4.3	W
10/14/19 19:05	5	3.1	W
10/14/19 19:11	5	2.6	W
10/14/19 19:16	6	2.7	W
10/14/19 19:22	5	2.3	W
10/14/19 19:28	5	3.5	WSW
10/14/19 19:34	5	3.5	W
10/14/19 19:39	5	3.6	W
10/14/19 19:45	5	3.1	W
10/14/19 19:51	10	3.2	W
10/14/19 19:57	10	2.8	W
10/14/19 20:02	10	2.5	W
10/14/19 20:08	9	1.4	WSW
10/14/19 20:14	9	2.0	W
10/14/19 20:20	9	0.4	SSW
10/14/19 20:25	9	0.6	SSW
10/14/19 20:31	9	1.3	SW
10/14/19 20:37	9	1.7	W
10/14/19 20:43	9	1.6	WSW
10/14/19 20:48	9	1.1	WSW
10/14/19 20:54	11	0.7	W
10/14/19 21:00	11	0.9	WSW
10/14/19 21:06	11	0.8	SW
10/14/19 21:11	11	0.4	WSW
10/14/19 21:17	9	0.6	SSW
10/14/19 21:23	6	0.9	SW
10/14/19 21:29	5	0.9	SW
10/14/19 21:34	5	0.4	W
10/14/19 21:40	6	0.7	NW
10/14/19 21:46	6	0.9	W
10/14/19 21:52	5	0.6	WSW
10/14/19 21:57	5	0.5	W
10/14/19 22:03	4	0.8	W
10/14/19 22:09	4	0.6	WSW

NOTE: Wind Direction reported in the direction that the wind is coming from

10/14/19 22:15	3	1.2	W
10/14/19 22:20	3	1.4	W
10/14/19 22:26	3	0.9	WNW
10/14/19 22:32	5	1.0	W
10/14/19 22:38	5	0.6	WSW
10/14/19 22:43	5	0.7	W
10/14/19 22:49	4	0.4	WNW
10/14/19 22:55	4	1.0	W
10/14/19 23:01	4	0.6	W
10/14/19 23:06	3	0.7	W
10/14/19 23:12	3	1.1	W
10/14/19 23:18	4	1.9	NNW
10/14/19 23:24	4	1.2	W
10/14/19 23:29	3	1.4	NW
10/14/19 23:35	3	2.7	NW
10/14/19 23:41	3	2.7	NNW
10/14/19 23:47	2	2.5	NW
10/14/19 23:52	2	2.6	NW
10/14/19 23:58	2	3.0	NNW

NOTE: Wind Direction reported in the direction that the wind is coming from

Attachment 4

