

September 27, 2019  
File No. 02219702.00

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

Mr. Jeffery 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: September Progress Report  
Keegan Landfill  
New Jersey Sports and Exposition Authority  
EA ID#: NEA 190001-13317

Dear Mr. Farrell and Mr. Meyer:

On behalf of the New Jersey Sports and Exposition Authority (NJSEA), SCS Engineers (SCS) submits this monthly progress report as required by Section C of the Administrative Consent Order (ACO), NEA19001-13317 (executed on March 21, 2019) for the Keegan Landfill. This report summarizes the compliance status and activities performed since the previous progress report was submitted on August 29, 2019.

In an effort to streamline reporting and ensure all information is distributed to all interested parties, this report is also submitted to satisfy the requirements of Condition 14 of the Sanitary Landfill Major Disruption Approval (Disruption Approval), issued on June 27, 2019.

## **COMPLIANCE MEASURES AND STATUS**

The work progress, summary of problems, activities planned, and required and actual completion dates for each ACO Condition is summarized in the table provided in Attachment 1. The work progress, summary of problems, activities planned, and required and actual completion dates for each Disruption Approval Condition is summarized in the table provided in Attachment 2. Further discussion of the difficulties encountered are provided below.

### **ACO Difficulties Encountered**

Monitoring station MS-5 did not meet the 85 percent valid data requirement for the week of September 15 (see Attachment 3).



Equipment maintenance is performed as needed. A summary of equipment maintenance is provided in Attachment 4.

Notifications of exceedances of the 30 ppb-for-30-minutes limit, based on monitoring station readings, were made to NJDEP as summarized in Exhibit 1 below.

Exhibit 1. Summary of End of August and September Notifications

Monitoring Station	Date
Non-Property Line Monitors	
MS-1	September 4
MS-2	August 29, 30, September 2, 4, 16, 19, 20, 21, 22, 23, 25
MS-3	None
At or Near Property Line Monitors	
MS-4	August 29
MS-5	September 1, 5, 6
MS-6	August 31, September 1, 3, 4, 5, 17, 18
MS-7	September 2, 3, 4, 5, 14, 16, 17, 18, 22
MS-8	August 30 September 1, 2, 3, 4, 10, 22, 25

Daily odor monitoring at the site, in accordance with the Monitoring Action Plan (MAP), has not detected any specific areas of odors, stressed vegetation or other specific issues at the Landfill.

Surface emissions monitoring (SEM) was performed on August 9 and 10 in response to high concentrations measured at the monitoring stations in late July. The high concentrations in late July were later determined to be invalid data. Surface emission monitoring is being performed again on September 26 and 27, for informational purposes. The August SEM data will be compared with the September SEM data.

Data review letters were submitted, as follows:

- For MS-1 and MS-2, on August 29, 30 and September 2, 4, 16, 19, 20, 21, 22, and 23. These letters are required to be submitted within 48-hours of the exceedance by Reference #11 of the EIP190001.

Cover soil deliveries and improvements continued throughout September.

A request for approval to relocate monitoring station MS-4 closer to the property line was sent to NJDEP on August 2. To date, we have not received a response to this request.

## Disruption Permit Difficulties Encountered

The gas collection and control system commenced operation on September 5, 2019. DEP personnel were onsite to witness flare startup and operation on September 5.

The blower/flare system shut down on September 16, 2019 at approximately 3 pm (due to a flare power generator shut down) and was restarted at about 10:15 pm. We believe that clogged oil filters caused the generator shutdown. The flare was shut down for about 20 minutes on September 17 to change the oil filters in the generator. There was no discharge of uncombusted gas from the flare stack during this time, as the automatic shut off valve automatically closed during the power outage.

Corrective actions to remedy the shutdown and prepare for future power outages are as follows:

1. Enabled notifications from the battery backup system at the control panel to provide notifications via email and text message when a generator power failure occurs.
2. Until the flare system is connected to the electrical utility (i.e., instead of or in addition to the generator), site personnel will check fuel levels in the generator at the start and end of their shifts.
3. The night security guard checks for flame at the flare every hour during overnight hours and logs their observations. Should the flare go offline, the security guard calls appropriate personnel to restart the gas system/flare and, if offline, the generator.
4. Generator oil filters will be replaced on a weekly basis as a preventative maintenance measure until the flare system is connected to the electrical utility.

## **EXPLANATION OF NON-COMPLIANCE**

### ACO Schedule

There were no periods of non-compliance with the ACO during the period of this progress report.

### Disruption Permit

There were no periods of non-compliance with the disruption permit during the period of this progress report.

## **EVALUATION OF CORRECTIVE MEASURES IMPLEMENTED**

### ACO Schedule

Since the execution of the ACO on March 21, 2019, the corrective measures implemented include actions intended to minimize intake of the waste that may contain gypsum wallboard, placement of daily cover, placement of additional intermediate cover, and minimization of the surface area of the working face. The landfill is currently not accepting any waste.

### Disruption Permit Conditions

Since issuance of the Disruption Permit on June 27, 2019, there were no periods of non-compliance, therefore corrective measures have not been required.

## **RECORDED MONTHLY MEASUREMENTS FOR DISRUPTION PERMIT**

SEM for methane and hydrogen sulfide is required to be conducted on a monthly basis upon completion of the construction of the gas collection and control system and through completion of the Environmental Improvement Pilot Test (EIPT). Results of the monthly SEM event will reported in

this section of the Progress Report. The GCCS commenced operation on September 5, 2019 and is in the initial shakedown and balancing period. The monthly SEM, required by the Disruption Permit, will commence in October.

A signed certification of information form is included in Attachment 5. The next report will be submitted on or before November 1, 2019. Please call either of the undersigned with any questions or comments.

Sincerely,



Lisa K. Wilkinson, PE  
Project Director I  
SCS Engineers



Gregory P. McCarron, PE  
Project Director II  
SCS Engineers

cc: G. Lugo, NJDEP (hardcopy and electronic copy)  
A. Fontana (electronic copy)  
M. Gerchman (electronic copy)  
S. Shah (electronic copy)  
V. Prieto, NJSEA (electronic copy)  
T. Marturano, NJSEA (electronic copy)  
A. Levy, NJSEA (electronic copy)  
C. Sanz, NJSEA (electronic copy)  
J. Stewart, Lowenstein (electronic copy)  
G. Castano (electronic copy)

## Attachment 1

**September 2019 Progress Report Summary  
Keegan Landfill (NEA190001-13317)**

No.	ACO Condition Description	B. Status of permitting, planning approvals and work progress	C. Difficulties Encountered	D. Activities Planned for next reporting period	E. Required and Actual Completion date
7.a	Submit Monitoring Action Plan (MAP)	On April 1, 2019, MAP was submitted to NJDEP; NJDEP Conditional Approval was received on April 8, 2019; Revised MAP was submitted on April 15, 2019.	None	None; activity is complete	Required: April 1, 2019  Actual: April 1, 2019
7.b	Install/operate continuous H <sub>2</sub> S Ambient Air Monitoring System	Eight (8) monitoring stations have been installed and are operational as of May 8th as required.	The 85 percent valid data was not met for MSS the week of September 5	Continue operation of monitoring stations. Quarterly monitoring report for period from startup through July will be submitted in October.	Required: May 8, 2019  Actual: May 8, 2019
7.c	Notify NJDEP of exceedances or potential to cause odor complaint or air pollution	Notifications were made on August 29, 30, 31, September 1, 2, 3, 4, 5, 6, 10, 14, 16, 17, 18, 19, 20, 21, 22, 23, 25 of exceedances of the 30 ppb for 30 minutes based on monitoring station readings.	Data review letters were submitted regarding the exceedances reported on August 29, 30 and September 2, 4, 16, 19, 20, 21, 22 and 23.	Continue operation of monitoring stations and reporting of exceedances.	Required: upon completion of 7.b above  Actual: on-going
7.d	Take measures to control or eliminate emissions	NJSEA has decided to design, permit and install GCCS; Disruption Permit was issued on June 27 and EIPT was issued on June 28. The following work has been completed; installation of six horizontal collectors, 28 vertical wells drilled, all the main header and laterals installed, system commenced operation on September 5, 2019.	None	Site restoration, installation of the monitoring ports, completion of surveying and asbuilt preparation will be completed during the next month.	Required: upon exceedance of Condition 7.c level  Actual: Ongoing
7.e	Submit estimate of generation of emission rates for H <sub>2</sub> S and other air contaminants	Letter report was submitted on May 29, 2019	None	None; activity is complete	Required: May 30, 2019  Actual: May 29, 2019
7.f	Immediately implement measures to maintain compliance	In accordance with NJSEA letter dated March 29, 2019 to NJDEP, wallboard restrictions have been enforced, additional intermediate soil cover has been placed on the western sideslopes, daily cover has been placed and compacted, and active face is minimized.	Due to Landfill shutdown, soil deliveries were not allowed from June 13 through June 21.	Wallboard restrictions will continue to be enforced should operation be allowed; additional intermediate soil cover will be placed; daily cover will continue to be placed and compacted.	Required: N/A  Actual: In progress

**September 2019 Progress Report Summary  
Keegan Landfill (NEA190001-13317)**

No.	ACO Condition Description	B. Status of permitting, planning approvals and work progress	C. Difficulties Encountered	D. Activities Planned for next reporting period	E. Required and Actual Completion date
7.g	If compliance not achieved by September 1, 2019, submit proposal for GCCS	<p>In advance of this requirement, NJSEA has decided to design, permit and install GCCS; Disruption Permit was issued on June 27 and EIPT was issued on June 28. EIPT Extension was issued on September 25 See item 7.d above for work progress.</p>	None	See item 7.d above for planned activities.	<p>Required: 30 days from NJDEP notification</p> <p>Actual: GCCS startup occurred on September 5, 2019.</p>

## Attachment 2



**September 2019 Progress Report Summary  
Keegan Landfill (Disruption Permit-13317)**

No.	Permit Condition Description	B. Status of permitting, planning approvals and work progress	C. Difficulties Encountered	D. Activities Planned for next reporting period	E. Required and Actual Completion date
1	Approval limited to installation and operation of 28 vertical gas extraction wells, six horizontal collectors, skid-mounted blower/flare system, condensate management system; approval need for other disruptions	Disruption Permit was issued on June 27 and EIPT was issued on June 28, EIPT Extension issued on September 25. The following work has been completed; installation of six horizontal collectors, 28 vertical wells drilled, all the main header and laterals installed, system commenced operation on September 5, 2019.	None	Site restoration, installation of the monitoring ports, completion of surveying and asbuilt preparation will be completed during the next month.	Required: Ongoing Actual: Ongoing
2	All odorous waste shall be loaded directly onto trucks and delivered to working face (at least 2x per day). Non-odorous waste may be placed on grade.	Condition has been complied with. Additionally, spray-applied neutralizer has been applied to trenches and waste.	None	None; excavation and waste relocation activities are complete	Required: Ongoing Actual: Complete
3	Immediate placement of 6 inches of soil over odorous waste at working face; non-odorous waste covered at end of work day, no boring or trench left open overnight	Condition has been complied with. Additionally, spray-applied neutralizer has been applied to trenches and waste.	None	None; excavation and waste relocation activities are complete	Required: Ongoing Actual: Complete
4	Dust Control measures shall be implemented.	Dust control measures have been implemented.	None	Continue to implement dust control measures.	Required: Ongoing Actual: Ongoing
5	Noise control measures shall be implemented.	Noise control measures have been implemented.	None	Continue to implement noise control measures.	Required: Ongoing Actual: Ongoing
6	Comply with air emission standards during disruption activities. Comply with GCCS Construction Odor Control Plan.	The Odor Control Plan has been implemented.	None	None; excavation activities are complete	Required: Ongoing Actual: Complete
7	Vectors shall be controlled by application of cover soil.	No vectors have been observed. Cover soil is applied.	None	Continue to control vectors.	Required: Ongoing Actual: Ongoing
8	Adequate water supply and adequate fire-fighting equipment shall be maintained at the facility.	Adequate water supply and fire-fighting equipment is readily available as appropriate.	None	Continue to have adequate water and fire-fighting equipment available.	Required: Ongoing Actual: Ongoing
9	Cease operations and contact Department should hazardous materials be encountered	No hazardous materials have been encountered during disruption activities.	None	None; excavation activities are complete	Required: Ongoing Actual: Complete
10	Follow OSHA standards and HASP; perform on-site air monitoring	OSHA standards have been observed.	None	Continue to follow OSHA standards and HASP and perform on-site air monitoring	Required: Ongoing Actual: Ongoing
11	Allow Department Inspectors to enter and inspect the facility	Department Inspectors are allowed to enter and inspect the facility	None	Continue to allow Department Inspectors to enter and inspect the facility	Required: Ongoing Actual: Ongoing
12	Notify Department 72-hours prior to initiation of disruption activities.	Department was notified on June 28 of trench excavation activities to start on July 1. Department was notified on July 25 of well drilling activities to start on July 30	None	None; activity is complete	Required: 72-hours prior to start Actual: June 28 and July 25

**September 2019 Progress Report Summary  
Keegan Landfill (Disruption Permit-13317)**

No.	Permit Condition Description	B. Status of permitting, planning approvals and work progress	C. Difficulties Encountered	D. Activities Planned for next reporting period	E. Required and Actual Completion date
13	Install and operate GCCS by September 17, 2019	Installation complete as described above in Item 1, operation of the GCCS commenced on September 5, 2019.	Shutdown of flare occurred on September 16 for 7 hour period. Cause was investigated and corrective actions were implemented	Continue with startup, adjustment and monitoring of GCCS. Remaining construction items as described above in Item 1	Required: 9/17/2019 Actual: Operation commenced 9/5/2019
14	Submit Monthly Progress Reports	This report satisfies this requirement for September 2019.	None	Continue to submit monthly progress reports as required	Required: First of Month Actual: Ongoing
15	Submit a report of Construction Activities at completion of construction	Documentation is ongoing during construction to prepare report following construction completion.	None	Continue to document construction activities	Required: 30 days after completion Actual: TBD
16	Certify Progress Reports by NJ licensed professional engineer	This report is certified by a NJPE	None	Continue to certify progress reports	Required: Monthly Actual: Ongoing
20	Apply Neutraline or equivalent during disruption activities; data sheet shall be provided prior to use	Documentation on Neutraline product was provided in permit application. Neutraline was applied as indicated above.	None	None; excavation activities are complete	Required: Ongoing Actual: Complete
21	Upon completion of construction, perform SEM for methane and H2S on a monthly basis along western slopes and plateau area	Since startup on September 5, 2019, system shakedown, balancing and adjustment is ongoing.	None	Anticipated start of required SEM is October 2019	Required: Monthly, after construction is completed Actual: start in October
21	Upon completion of EIPT, submit an application for construction and operation of a GCCS for entire landfill	Application required after completion of EIPT (EIPT expiration December 24, 2019).	None	NA	Required: Within 14 days after EIPT is completed (January 7, 2020) Actual: Ongoing

Note: Conditions 17, 18 and 19 are general conditions.

## Attachment 3

Attachment 3  
Keegan Landfill  
Monitoring Station Availability

8/25/19 - 8/31/19	
Station	Percent Valid Data
MS1	94.6%
MS2	94.1%
MS3	96.8%
MS4	97.1%
MS5	91.4%
MS6	90.3%
MS7	93.8%
MS8	89.9%

9/1/19 - 9/7/19	
Station	Percent Valid Data
MS1	94.1%
MS2	96.8%
MS3	95.7%
MS4	97.1%
MS5	96.5%
MS6	91.2%
MS7	96.7%
MS8	86.1%

9/8/19 - 9/14/19	
Station	Percent Valid Data
MS1	95.5%
MS2	86.9%
MS3	91.3%
MS4	97.1%
MS5	96.5%
MS6	89.6%
MS7	96.7%
MS8	96.7%

9/15/19 - 9/21/19	
Station	Percent Valid Data
MS1	96.4%
MS2	92.8%
MS3	94.4%
MS4	95.4%
MS5	83.4%
MS6	96.0%
MS7	95.9%
MS8	96.7%

## Attachment 4

Keegan Landfill  
Monitoring Station Equipment Maintenance

Date	# of Hours	Description of Work Done
Tuesday, September 03, 2019	1.5	Post holiday weekend check on all stations and chargers
Thursday, September 5, 2019	1	Zeroed Jerome at Station 8
Sunday, September 08, 2019	1	Zeroed Jerome at Station 3
Wednesday, September 11, 2019	2	Reset locked up Jerome communications at Stations 2, checked all station battery chargers
Thursday, September 12, 2019	1.5	Replaced Jerome at station 2 due to locked communications
Friday, September 13, 2019	2	Pre Weekend Stations check, reset chargers at stations
Saturday, September 14, 2019	2	Manually Zeroed Jerome at Station 6, Checked battery chargers at all stations
Monday, September 16, 2019	2	Post Weekend Stations check, reset chargers at station 5 & 7
Friday, September 20, 2019	2	Pre Weekend Stations check, reset chargers at stations
Saturday, September 21, 2019	1	Manually Zeroed Jerome at Station 5, Checked battery chargers at all stations
Sunday, September 22, 2019	1	Manually Zeroed Jerome at Station 3, Checked battery chargers at all stations
Monday, September 23, 2019	2	Post Weekend Stations check, reset chargers at stations
Tuesday, September 24, 2019	1	Swapped Jerome at MS2 per request

## Attachment 5

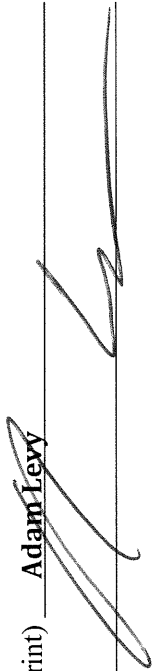


NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CERTIFICATION OF INFORMATION

Facility ID Keegan Landfill, NEA190001-13317; SW Facility ID No. 133571  
COMPANY New Jersey Sports & Exposition Authority

1. Responsible Official - This first tier of this certification is to be signed by the responsible official as defined at N.J.A.C. 7:27-1.4

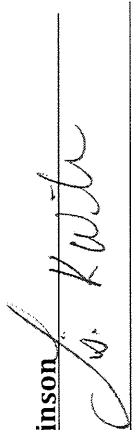
"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."

Name (type or print) Adam Keyy  
  
Signature \_\_\_\_\_

Title Vice President of Legal and Regulatory Affairs  
Date 9/27/2019

2. Individual(s) with direct knowledge of and responsibility for the information contained in the certified document (N.J.A.C. 7:27-1.39(a)1)


A. "I certify under penalty of law that I believe the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."

Name (type or print) Lisa K. Wilkinson  
  
Signature \_\_\_\_\_

Title SCS Engineers Project Director (Consultant)  
Date 9/27/2019

3. Individual(s) with direct knowledge of and responsibility for the information contained in the certified document (N.J.A.C. 7:27-1.39(a)1)

A. "I certify under penalty of law that I believe the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."

Name (type or print) Marcus M. Scrimgeour, PE  
  
Signature \_\_\_\_\_

Title SCS Engineers Project Manager (Consultant)  
Date 9/27/2019