

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N268962633

FACILITY: VIENNA JUNCTION LANDFILL		SRN / ID: N2689
LOCATION: 6233 HAGMAN RD, ERIE		DISTRICT: Jackson
CITY: ERIE		COUNTY: MONROE
CONTACT: Christina Pearse , Team Environmental Manager		ACTIVITY DATE: 05/10/2022
STAFF: Diane Kavanaugh Vetort	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: ROP Major Source FCE and SEM (MK) and Jeff Benya, AQD. Records received 4/15/22 to prepare for SEM portion. Remaining compliance records received 5/13/22. See MK 5/10 report for SEM portion.		
RESOLVED COMPLAINTS:		

FACILITY: Vienna Junction Park Sanitary Landfill and Vienna Junction Energy, LLC.

Republic Services representatives:

**Ben Carr, Regional Landfill Manager, Ohio, acting at this time due to John Bolyard retirement.
BCarr4@republicservices.com**

Christina Pearse, Environmental Manager, 734-231-8217, cbossick@republicservices.com

Nicole Green, Environmental Specialist, 734-572-6051, ngreen@republicservices.com

EGLE AQD present:

Diane Kavanaugh Vetort - Jackson DO

Mike Kovalchick - Jackson DO

Jeff Benya - Warren DO

On May 10, 2022, at 9:00 AM, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted an announced inspection of the Vienna Junction Industrial Park Landfill (VJ) and Vienna Junction Energy, LLC (VJE) a landfill that is owned and operated by Republic Services, Inc., located at 6506 Hagman Road, Erie, Michigan. The purpose of this inspection was to determine compliance of this facility with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; the conditions of Renewable Operating Permit (ROP) Permit Number MI-ROP-N2689-2020; National Emission Standards for Hazardous Air Pollutants 40 CFR, Part 63, Subpart AAAA (NESHAP); and the Federal New Source Performance Standard for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014, 40 CFR, Part 60, Subpart XXX (NSPS Subpart XXX). NOTE: The ROP is currently undergoing reopening by AQD in order to remove/replace the obsolete Federal standards with revised standards in updated Template Tables.

Mike Kovalchick (MK) and Jeff Benya (JB) performed an abbreviated methane surface emission monitoring (SEM) survey while Diane Kavanaugh Vetort (DKV) performed an inspection of the landfill and the flare. This inspection report covers the compliance inspection. Refer to the

separate inspection report written by MK that covers the results of the SEM portion of the inspection. The SEM results were also provided to VJ by email and letter.

RECORDS REQUESTED:

Prior to the inspection, AQD requested electronic records by email required to prepare for the AQD SEM. On 4/15/2022 AQD received VJ response:

- 1) Last two quarter of 2021 SEM reports are appended however monitoring for 1Q 2022 is not yet complete. We still have to perform the 30 day recheck. I will send it once complete.
- 2) PDF of the GCCS as built is attached
- 3) The latest available monthly monitoring summary of required XXX/AAAA wellhead parameters is appended.

As part of the compliance inspection planned for May 10, 2022, on May 6, AQD requested VJ submit the following records electronically by May 13, 2022. Records were requested for the period May 2021 through April 2022 unless otherwise stated.

1. Monthly Cover Integrity Reports (checklist /forms) for the required period.
2. Flare data, including flow rate (scfm), Temperature (F), vacuum, and CH4 readings for the prior 6 months up to and including the date of inspection (5/10).
3. Well data, including O2, CH4, and flow rate for the prior 6 months.
4. Hydrogen Sulfide sampling of landfill gas conducted during the required period.
5. Monthly summary of leachate disposal quantities for the required period.
6. Highlight in previous submittal (below) - pending Q1 SEM information if/when available.

In an email on 5/13/2022 VJ submitted the following in response to AQD's 5/6/2022 email :

1. Appended
2. Partially Appended, An additional email will come with flare as data as we are having trouble with file size.
3. Appended
4. No H2S sampling has been performed
5. Appended
6. Appended

"As requested during the inspection, I will also follow up with approximate sludge volumes and a well legend. I don't have those complete yet."

Following the inspection, on 5/19/22 AQD received the requested additional information and records listed:

1) Legend for the gas wells:

VNEW- Vienna Extraction Well-vertical wells

VNLCR061- Vienna Leachate clean out riser 61

VNEWLR64- Leachate riser

VNEWHCE1- Horizontal collector

2) Sludge volume: VJ stated *volume is between 1-2% of our total volume so as suspected it is very low.*

3) FLARE Data for the period of October 2021 through April 2022 in two Zip files.

FACILITY BACKGROUND

SECTION 1 VIENNA JUNCTION LANDFILL:

Section 1 of the EXISTING ROP: EUASBESTOS, FGLANDFILL-XXX, FGLANDFILL-WWW, FGACTIVCOLL-XXX and FGACTIVCOLL-WWW: This is an active MSW landfill owned/operated by Republic Services, with both a closed portion under final cover, where the current Vertical Expansion has begun active filling, and a second active area under interim cover. VJ also owns/operates a permit to install exempt Enclosed Flare under FGENCLOSEDFLARE-XXX, FGENCLOSEDFLARE-WWW. This is the only currently operating NSPS air pollution control equipment at the facility for the landfill gas (LFG) collection and control of non-methane organic compound (NMOC) emissions. NOTE: WWW is now obsolete and has been replaced with Federal Plan Subpart OOO/XXX. VJ is subject to Subpart XXX and MACT AAAA only. ROP reopening is updating these tables.

AQD reviewed the 2021 Solid Waste Report, EGLE Materials Management Division. VJ has reported Municipal, Commercial Waste (MCW) of 629,381 cubic yards (3 cubic yards = 1 ton); Industrial Waste (IW), Construction & Demolition Waste (C&D), and Alternate Daily Cover (ADC) of 295,471 cubic yards, for a total wastes of 924,852 cubic yards. The report indicates VJ has a remaining capacity of 7 years.

SECTION 2 VIENNA JUNCTION ENERGY (OPAL FUELS owner/operator)

FGTREATMNTSYSTEM-XXX and FGTREATMNTSYSTEM-WWW. This is owned/operated by Fortistar Methane Group, now Opal Fuels, and has been inoperable since approximately 3/18/2016 due to the loss of a third party off-site user. The landfill gas (LFG) Treatment System was the primary NSPS control equipment initially.

COMPLIANCE INSPECTION

Upon my arrival I did not observe any obvious fugitive dust or odors, as seen from the drive into the site, and the office parking lot. MK and JB were just coming from the office to their car and left to conduct the upwind/downwind calibration of SEM equipment. Inside the office, I met with Christina, Nicole, and Ben, in a conference room for a pre-inspection review. I asked various compliance related questions (list below) and they fully answered or agreed to find the requested information. Republic contacts fully cooperated with AQD during both parts of the inspection.

LF: Currently there are Areas 1-7 as identified by VJ. Areas 1-4 have one cell each; 5 has two cells; 6 has 4 cells and (new) 7 has two cells but will have four eventually. VJ currently has two active areas, one on top of the older landfill and one at the new Area 7. The majority of waste is being placed in the new fill area. There are two solidification pits located at the top/active area of the older hill. I learned VJ is receiving Auto shredder fluff which they mix with lime in these pits. Lime has apparently helped with the odors known to this material from my past experience. The material is applied as alternate daily cover.

Leachate: Per Christina the process is the same and hasn't changed. Some leachate is pumped / hauled and some is discharged to the Toledo WWTP. One issue she told me about was in November 2021, VJ took a listed waste and this was reported to Larry Bean, MMD. She said MMD is in the process of addressing this issue with the parties involved. VJ currently ceased pump/haul from this area. Per Christina the waste is likely something they could have taken.

Cover materials in use include final cover - observed numerous grassy areas now under final cover. Christina pointed out a large recently seeded area; looked good. Interim cover is also used, mainly clean soils, and Auto shredder (fluff) is mixed with lime in solidification pits. This is Alternate Daily Cover (ADC).

Per Christina, Republic is not sampling for hydrogen sulfide at this landfill. This was done several years ago per AQD request letter, and it was determined sulfur was very low and there was not a potential to emit or Rule 201 permit issue. The ROP does not have sulfur limit.

I asked about any identified odorous wastes and Christina and Ben said there are none they could think of. I asked about WWTP sludges and Ben said they do take some but not very much. They could not say where it is from or how much. I asked they review and provide this information.

Republic's C&D Debris landfill, located across the border in Ohio, has closed. I observed it to have complete final cover. Christina said VJ is taking some more C&D than in the past, but it is not excessive. Apparently, C&D is being split between numerous landfill locations.

The Compost area at VJ is gone per Christina. I noted it had shrunk at the last inspection to make way for new Area 7 construction which has now encompassed the entire area.

Asbestos: I observed one sign at the entrance to the new active face / area. At the end of the inspection, JB identified himself as an Asbestos inspector. He and I and Republic briefly discussed asbestos handling and notifications. Christina said she submits notifications through the EGLE AQD online form (noted she has not for this year yet). They keep manifests and map locations. Jeff noted they need to make sure they have an operator observe asbestos waste delivery /disposal to check that bags/waste is properly labeled. In the future Jeff will conduct a complete inspection.

Naming of Wells: I asked for clarification and Christina said that she will send me a legend/key.

Groundwater & Gas Migration Probes: During the inspection I asked about the status of offsite gas migration monitoring. Christina said there are no issues at this site. They monitor gas probes quarterly, and groundwater semi-annually.

Annual Solid Waste Report: I reviewed EGLE Material Management Division annual report for VJ. Waste receipts total for 2021 = 924,852 cubic yards. Remaining capacity is approximately 3.2 million cubic yards, and they used 450K in 2021 and have about 7 years remaining life.

Upon MK and JB return to the office they then went out with Nicole to conduct the SEM. At the same time, I rode with Christina and Ben around the landfill perimeter, to the Flare, to the existing active area and solidification pits, and then to the new active area. She then dropped me off where MK, JB, and Nicole, were conducting SEM at the east side of the new active area to assist. Christina and Ben went back to the office. MK, JB, Nicole, and I walked the east slope to the south slope, to the west slope / along the haul road and then back the way we came, to the south slope and continued down the south slope of the older landfill hill until we reached the office.

The inspection focused on EUASBESTOS-XXX, FGLANDFILL-XXX / -AAAA, FGACTIVCOLL-XXX / -AAAA, and FGENCLOSEDFLARE-XXX / -AAAA

During the inspection, the overall condition of the landfill roads, surface and active areas appeared very good. While driving around the perimeter I did not observe many fugitive dust, erosion, leachate, or waste related issues. I did not detect any gas odors during the driving observation. I did detect the Auto shredder fluff odor, which is distinct and was mild to moderate intensity, and I observed the odor in the immediate areas where it was located. The odor was noted near the solidification pits and at the active faces. I detected garbage/waste type odors near the active faces, especially the new active face. Again, it was mild to moderate intensity. At the entrance to the new active area, I observed an Asbestos sign.

Later, while I was walking the new Area 7 (newest cells) around the active face I did observe a "sewage sludge/ feces" type odor at one leachate outbreak area. Color of leachate was orange/rust and it extended @ 20 feet down the south side slope, midway. Nicole made note of this and said it would be addressed. I also detected landfill gas odors on the west side slope in several locations. One of these was near a penetration that MK / JB identified as an exceedance and I placed a flag. I also observed a couple larger erosion rills, these were noted by Nicole.

It is noted Cover Integrity records received following the inspection show "no issues" for the past 7 month period. This is suspect based on observations today, and VJ is advised to inspect and report all cover issues more thoroughly.

During the driving inspection, Christina, Ben, and I stopped and inspected the flare. I observed the condition of the compressors inside their building, the outside piping to the flare, the outside structure of the Flare and its control panel. All appeared to be in good condition and operational. Two blowers were operating, and there is a third for back up. Everything appeared to be operating properly, there were no odors or visible emissions. Ben was able to generate the digital screen on the Flare control panel for readings. I recorded at about 10:30 AM:

275571 kscf Total; Flow rate: 1715 scfm; Temperature: 1699 degree F; Vacuum: 51; Reading at compressor: 123 psi

Next to the Flare is the EUTREATMENTSYSTEM. This is Section 2 of ROP owner/operator Fortistar Methane Group, now Opal Fuels. This is only a Treatment Plant, totally outdoors (no building)

and it has been idle for many years. There is no third party for the landfill gas. Christina indicated they would be reviewing this with Opal Fuels for possible removal.

CLOSING CONFERENCE

Upon returning to the LF office, we discussed a few other items. Christina will submit pending recordkeeping items with the requested compliance record keeping due Friday, May 13, 2022. She had a couple things to discuss with me, 1) their comments due on the Working Draft reopening ROP and 2) the pending final approved Gas Collection and Control System Design Plan (GCCS).

1) Reopening WD was sent to VJ with 30 day comment period ending May 9. Christina said they would like an extension. I requested she send an email request and I would approve. This was received and approved following the inspection. Comments are now due June 9.

2) GCCS: AQD reviewed & sent comments 2021. VJ partial response included a virtual meeting. AQD reviewed and submitted a revised response to VJ for one item. VJ is supposed to revise and resubmit the GCCS Plan incorporating AQD comments so we will have a final version. Significant regulation changes occurred since it was submitted. Christina said VJ will revise it to remove old/obsolete regulations. They will also address the AQD denials & comments. She said it should be submitted this month.

RECORDS REVIEW

All requested inspection records were received and reviewed. All records are placed in AQD facility files. AQD continues to prefer more detail be provided on the Cover Integrity Reports. It is noted that VJ reported no issues /repairs for the prior 7 months. During the inspection today AQD found obvious erosion rills and leachate outbreaks that should be in these reports and addressed timely.

On 5/20, AQD sent VJ an email requesting revised Flare records sufficient to demonstrate compliance with ROP Condition VI. 2. (below) with the tested average combustion temperature of 1606 degrees F. during the most recent NSPS compliant performance test on September 16, 2020.

Condition VI. 2. The permittee shall keep monthly readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

- a. The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test. **(40 CFR 60.768(b)(2)(i))**
- b. All 3-hour periods of operation during which the average combustion temperature was more than 28°C (82°F) below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.762(b)(2)(iii) was determined. **(40 CFR 60.768(c)(1)(i)).**

Based on the initial records received /reviewed compliance with the Flare operating temperature could not be determined. The allowed minimum range is 1606 - 82 = 1524.

On 6/1, AQD received the above Flare records for the period of September 2020 through February 2022. Records indicate non-compliance with the Condition VI. 2. with temperature exceedances on numerous dates and in some cases for significant periods of time. This appears to be violations of several ROP Conditions and NESHAP AAAA applicable requirements. A Violation Notice (VN) was issued on 6/3/2022 citing ROP Conditions and NESHAP AAAA.

COMPLIANCE SUMMARY

AQD has determined based on the site inspection and review of records received, that It appears that VJ is in non-compliance with the NSPS Subpart XXX and NESHAP Subpart AAAA Flare minimum temperature requirement contained in their ROP. Related Conditions are being cited as in violation and a VN was issued on 6/3/2022.

Additional pending items outside of this inspection include 1) correction of SEM exceedances that AQD found during today's inspection (report provided to VJ); 2) Review/response to REO ROP; 3) Formal revised GCCS and comments VJ indicated will be forthcoming.

NAME *Elaine Kavanaugh Vetter*

DATE 08/04/22

SUPERVISOR 