



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
JACKSON DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

August 2, 2022

Christina Pearse  
Republic Services, Inc.  
5011 S. Lilley Road  
Canton, Michigan 48188

SRN: N2689, Monroe County

Dear Christina Pearse:

On May 10, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an inspection of Vienna Junction Industrial Park Sanitary Landfill and Vienna Junction Energy, LLC (VJ) located at 6233 and 6505 Hagman Road, Erie, Michigan. The purpose of this inspection was to determine VJ's compliance 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 (Act 451); the Air Pollution Control Rules; the conditions of Renewable Operating Permit (ROP) number MI-ROP-N2689-2020; the National Emission Standards for Hazardous Air Pollutants (NESHAP): Municipal Solid Waste Landfills, 40 CFR Part 63, Subpart AAAA; and the Federal New Source Performance Standard (NSPS) for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014, 40 CFR Part 60, Subpart XXX.

On June 3, 2022, the AQD sent VJ a Violation Notice (VN) citing violations discovered as a result of the inspection and records review and requested the facility's written response by June 25, 2022. AQD received VJ's response on June 24, 2022. Upon review and internal discussions, the AQD does not fully agree with the facility's assessment that the Enclosed Flare will continue to operate without further compliance issues. The AQD has concerns regarding the Enclosed Flare's continued compliance with the required minimum temperature and the ability of the Enclosed Flare to operate consistently without significant start up, shut down, or malfunction. The Enclosed Flare is the only operating landfill gas control device at the facility and as such must control all the generated and collected landfill gas sufficient to meet the federal standards and conditions of their ROP. AQD received correspondence from Vienna Junction Energy, LLC on July 13, 2022, stating they permanently ceased operations at the facility and are requesting removal from the ROP.

AQD's general understanding from the landfill industry is that enclosed flares have a more restrictive or less flexible turndown ratio as it relates to adjusting to landfill gas flow rate. This in turn can be problematic in maintaining its operation and the

established required minimum temperature. AQD's review of the past two years of VJ submitted NSPS and ROP Certification & Deviation reports found frequent Startup, Shut down and Malfunction events. Furthermore, the May 10, 2022, inspection also included an abbreviated AQD conducted surface emission monitoring (SEM) event. The survey found 11 exceedances. This was a follow-up SEM survey to one that was conducted on June 17, 2020. Thirty-two SEM hits were recorded during the June 17, 2020, visit. While this is an improvement, there were several issues identified. This included discovery of a low applied vacuum issue for the wellfield located near the top of the hill, poorly sealed surface penetrations, and a lack of a gas collection and control system (GCCS) on the side slopes of the active area. Please refer to AQD's letter dated May 12, 2022, for the list of five recommendations.

Based on the cited violations, specifically the large amount of time the Enclosed Flare operated outside of the compliant operating temperature as determined during emission performance testing, and our review of the same two-year period of VJ's semi-annual deviation reporting, it appears the Enclosed Flare experiences downtime consistently and has the potential to continue to do so. There is a concern that landfill gas may not be properly collected and controlled consistently due to minimum temperature or other factors such as variable gas flow from the well field.

The well records VJ provided to AQD as part of the inspection only provide minimal data and did not include methane content or gas flow. Therefore, AQD has not assessed VJ's well field gas collection and flow rates.

AQD is requesting VJ consider the following and submit a more robust compliance plan response including but not limited to the following:

- 1) Develop, implement, and submit a formal Preventative Maintenance and Malfunction Abatement Plan for the existing Enclosed Flare pursuant to Act 451, Michigan Admin Code R 336.1911 (Rule 911).
- 2) Submit VJ's Enclosed Flare temperature records pursuant to the applicable ROP conditions cited in the June 3, 2022, VN, monthly, starting with July 2022, for the next 12-month period within 15 days following the end of each calendar month.
- 3) Evaluate and propose the installation of a replacement and/or backup flare, such as an open flare or other acceptable landfill gas control device. This can be in the form of a Permit to Install (PTI) application for the new flare.
- 4) Submit the latest available monthly well records report including well head readings for methane %, CO<sub>2</sub> %, O<sub>2</sub>%, Balance %, Temperature, Flow, Well Pressure, and Header Pressure. The report shall be submitted in an excel spreadsheet file format.
- 5) Submit a status report on VJ's efforts to address the issues identified in the May 10, 2022, SEM survey letter (other than item 1 which AQD acknowledges has been addressed).

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Please submit a written response to this letter by August 17, 2022, including VJ's proposal to address the above items and/or a schedule to complete the above items.

Thank you for your attention to the above request and for your continued cooperation. Please be advised that continued violations of the Company's existing ROP, and/or applicable federal regulations for their process equipment may result in AQD referral of cited violations for escalated enforcement action.

If you have any questions, please contact me at the number listed below or Diane Kavanaugh Vetort at 517-416-3537.

Sincerely,



Scott Miller  
Jackson District Supervisor  
Air Quality Division  
517-416-3537

cc:

Ryan Baisden, P.G. Environmental Manager, Republic Services, Inc.  
Suparna Chakladar, Opal Fuels (Vienna Junction Energy)  
Mary Ann Dolehanty, EGLE  
Christopher Ethridge, EGLE  
Brett Coulter, EGLE  
Mike Kovalchick, EGLE  
Jeff Rathbun, EGLE  
Diane Kavanaugh Vetort, EGLE