



December 28, 2023

Mr. Matt Karl
Michigan Department of Environment, Great Lakes, and Energy
Lansing District Office
Air Quality Division
525 W. Allegan (Constitution Hall 1st Floor)
Lansing, MI 48933

**Subject: Response to Violation Notice dated December 7, 2023
Energy Developments Grand Blanc, LLC
Renewable Operating Permit No.: MI-ROP-N5991-2016 (Section 2)**

Energy Developments Grand Blanc, LLC (EDGB) is submitting this response to the Violation Notice (VN) received from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) dated December 7, 2023 (enclosure). This response letter addresses the items within the VN which were noted as requiring response and is being submitted prior to the December 29, 2023 response deadline.

The VN notes that it was issued after review of the facility's 1st Semi-Annual 2023 Deviation & 40 CFR 63 NESHAP (Treatment System) Report, submitted September 15, 2023, which disclosed six (6) occurrences where treated landfill gas (LFG) was vented to the atmosphere in violation of Renewable Operating Permit (ROP) MI-ROP-N5991-2016, Section 2, Special Condition III.2 and rules 40 CFR 63.1955(a), 40 CFR 63.1959(b)(2)(iii)(C), and 40 CFR 62.16714(c)(3).

The VN requested EDGB provide additional information related to the venting events and corrective actions taking place to eliminate future venting events. The three (3) EGLE additional information requests and EDGB's responses are provided below.

1. Explanation of how the duration of venting events was determined:

The duration of the venting events was determined through discussion with site personnel which noted that each event lasted between two (2) and three (3) minutes. This allowed for purging of the small volume of high oxygen gas present within the system. For emission calculations, EDGB conservatively utilized five (5) minutes for the event durations.

2. Estimation of the amount of treated LFG emissions:

Each event was estimated to last no more than five (5) minutes with the flow rate being 2,412.5 standard cubic feet per minute (scfm), the treatment system flow rate. The quantified emissions per event are conservative based on the use of a longer event duration and assumption that the flow rate would be sustained for the duration of the event even though venting flow tapers off during venting events.

Emission calculations utilized the site-specific sulfur dioxide (SO₂) emission factor calculated utilizing facility LFG sulfur testing results and AP-42 emission factors for volatile organic



compounds (VOC), hazardous air pollutants (HAPs), and carbon monoxide (CO). CO, though not likely generated during the events, is included in emissions estimates. Per AP-42, CO is not a typical LFG constituent but may be present when subsurface combustion is occurring within the landfill generating LFG. EDGB is not aware of historical or current subsurface combustion taking place within the Citizens Disposal, Incorporated Landfill which supplies LFG to the EDGB facility.

The following table provides an estimate of maximum emissions per event.

Pollutant	Estimated Emissions			
	Per Event		1 st Semi-Annual Total	
	Pounds	Tons	Pounds	Tons
CO	0.13	6.50E-05	0.78	3.90E-04
SO ₂	1.56	7.80E-04	9.36	4.68E-03
VOC	0.01	5.00E-06	0.06	3.00E-05
Total HAPs	0.32	1.60E-04	1.92	9.60E-04
Single HAP (Toluene)	0.12	6.00E-05	0.72	3.60E-04

- A description of the modifications made to the LFG treatment system to ensure that treated LFG that cannot be routed for subsequent sale or beneficial use is routed to an appropriate control device.*

As noted in the 1st Semi-Annual 2023 Deviation & 40 CFR 63 NESHAP (Treatment System) Report, EDGB had already engaged a consultant to evaluate the facility and propose design modification(s) for the LFG treatment system to ensure treated LFG that cannot be routed for subsequent sale or beneficial use is routed to a control device.

It was determined that the installation of a Solar Spark® Passive Vent Flare Model CF-10 (solar flare) was the preferred site modification which ensured all treated LFG was able to be controlled. During the infrequent high oxygen gas events, the high oxygen gas at EDGB Plant 2 will be vented to the solar flare for combustion. The solar flare will not be utilized for purposes other than to control high oxygen gas.

An air permit applicability determination for the solar flare was conducted. The potential emissions were determined to be below the Significant Emissions Rates pursuant to R 336.1119; therefore, a Permit to Install is not required.

The solar flare, which has a maximum flow rate of 140 scfm, was ordered on September 19, 2023 and delivered to the facility the week of December 18th. Installation completion is planned for this week (December 25-29, 2023).



If you require additional information or other support related to this matter, please contact me at either Meghan.Stackhouse@edlenergy.com or (517) 243-3676.

Sincerely,

A handwritten signature in blue ink, appearing to read 'MS', written over a horizontal line.

Meghan Stackhouse
Senior Environmental Manager
EDL Energy

Enclosure: Violation Noticed dated December 7, 2023

cc: Rocky Tondo, Elizabeth Park – EDL Energy (Electronically)
Summer Hitchens, Katharine Henry – ICT (Electronically)
Matt Karl – EGLE (Electronically and Hard Copy)
Jenine Camilleri – EGLE (Hard Copy)
Sarah Marshall – EPA Region 5 (Electronically)
Kelly DeWitt – EGLE (Electronically)



GRETCHEN WHITMER
GOVERNOR

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



PHILLIP D. ROOS
DIRECTOR

December 7, 2023

VIA EMAIL

Rocky Tondo
Energy Developments Grand Blanc LLC
PO Box 14217
Lansing, Michigan 48901

SRN: N5991, Genesee County

Dear Rocky Tondo:

VIOLATION NOTICE

The Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), has received the first semiannual 2023 compliance report for Energy Developments Grand Blanc (EDGB) located at 2361 West Grand Blanc Road, Grand Blanc, Michigan. The purpose of this semiannual compliance report was to report EDGB'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; and the conditions of Renewable Operating Permit (ROP) number MI-ROP-N5991-2016.

During the review of the semiannual compliance report, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
Landfill Gas (LFG) Treatment System (EUTREATMENTSYS)	ROP No. MI-ROP-N5991-2016 Section 2. EUTREATMENTSYS, Special Condition (SC) III.2 - 40 CFR 60.752(b)(2)(iii)(C); 40 CFR 63.1955(a)* 40 CFR 62.16714(c)(3); 40 CFR 63.1959(b)(2)(iii)(C)	In the semiannual compliance report, the facility noted six (6) occurrences where the facility vented treated landfill gas (LFG) to the ambient air.

*The stationary source was subject to the Standards of Performance for Municipal Solid Waste Landfills promulgated in 40 CFR Part 60, Subpart WWW. On June 21, 2021, the facility became subject to the Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction on or Before July 17, 2014, and Have Not Been Modified or Reconstructed Since July 17, 2014, as specified in 40 CFR Part 62, Subpart OOO. Michigan is not currently the authorized representative for 40 CFR Part 62, Subpart OOO.

The semiannual compliance report noted that during the reporting period (January 1 through June 30, 2023) EDGB discovered treated Landfill Gas (LFG) was vented to the atmosphere after being processed through the treatment system, but prior to combustion in the engines using a release valve on six (6) occasions. The release of the treated LFG was not controlled in accordance with the ROP, or the applicable federal regulatory requirements noted in the table above, which specify that “venting of treated LFG to the ambient air is not allowed”. The current ROP references underlying applicable requirements (UARs) for 40 CFR 60.762(b)(2)(iii)(C) and 40 CFR 63.1955(a), however, these requirements have been superseded since the issuance of the ROP by 40 CFR 62.16714(c)(3) and 40 CFR 63.1959(b)(2)(iii)(C); therefore, both are noted in the table above. The semiannual compliance report noted that it was conservatively estimated that each event lasted no more than five (5) minutes each and occurred on January 30, 2023, February 20, 2023, April 5 and 13, 2023 and June 15 and 20, 2023. The semiannual compliance report noted that corrective measures included EDGB contracting a consultant to evaluate the facility and design a modification for the LFG treatment system to ensure treated LFG that cannot be routed for subsequent sale or beneficial use is routed to a control device which complies with either 40 CFR 60.752 (b)(3)(iii)(A) or (B), which have been superseded by the requirements of 40 CFR 62.16714(c)(1) or (2) and 40 CFR 63.1959(b)(2)(iii)(A) or (B).

Please submit a written response to this Violation Notice by December 29, 2023, (which coincides with 21 calendar days from the date of this letter). The written response should include: an explanation of how the duration of the venting events was determined, an estimation of the amount of treated landfill gas emissions; a description of the modifications made to the LFG gas treatment system to ensure that treated LFG that cannot be routed for subsequent sale or beneficial reuse is routed to an appropriate control device.

Please submit the written response to Matt Karl at EGLE, AQD, Lansing District, at P.O. Box 30242, Lansing, Michigan 48909-7742 and KarlM@michigan.gov and submit a copy to Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If EDGB believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violation cited above and for the cooperation that was extended to me during my inquiry about the semiannual compliance report for EDGB.

Rocky Tondo
Energy Developments Grand Blanc LLC
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If you have any questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Matthew R. Karl". The signature is written in a cursive style with a large initial 'M'.

Matt Karl
Senior Environmental Quality Analyst
Air Quality Division
517-282-2126

cc: Meghan Stackhouse, EDL Energy
Sarah Marshall, EPA Region 5
Annette Switzer, EGLE
Christopher Ethridge, EGLE
Brad Myott, EGLE
Jenine Camilleri, EGLE
Bob Byrnes, EGLE