



February 1, 2019

MDEQ – Lansing District Office
Attn: Julie Brunner
525 W. Allegan (1 South)
P.O. Box 30242
Lansing, MI 48909

And

Ms. Jenine Camilleri
Enforcement Unit Supervisor
MDEQ-AQD
P.O. Box 30260
Lansing, MI 48909-7760

**Response to Violation Notice Dated January 17, 2019
Energy Developments Grand Blanc, LLC
MI-ROP-N5991-2016 Section 2**

Energy Developments Grand Blanc, LLC (EDGB) is submitting this response to the Michigan Department of Environmental Quality (MDEQ) Violation Notice dated January 17, 2019. Based on a stack test report performed November 28, 2018, MDEQ alleged EDGB was in violation of Special Condition I.1, which limits each engine (EUENGINE6 and EUENGINE7) to 1.7 lb/hr of Sulfur Dioxide (SO_x). This is the second notice of an ongoing alleged violation of the referenced condition, which was first noted in a Violation Notice from the MDEQ March 28, 2018, based on a revised 2017 MAERS submittal dated March 16, 2018. EDGB is aware of the elevated SO₂ levels and is taking immediate measures to regain compliance. Below are details of EDGB's response to the violation and additional requested information.

The updated 2017 MAERS emission calculations submitted March 16, 2018, were based on site-specific Total Reduced Sulfur (TRS) testing performed on May 31, 2016. As a result of this and further testing, EDGB concluded the current sulfur concentrations were significantly above the level expected by the permit- a level based on AP-42 reference values rather than site-specific testing. As part of the corrective action to address the initial Violation Notice, EDGB revised the 2017 MAERS calculations, resubmitted the 2017 Annual Compliance Certification, and committed to submitting a Permit-to-Install (PTI) application to revise the SO_x emission limits for the two engines. This PTI application was submitted on June 22, 2018. Additionally, as TRS concentrations in landfill gas can be hard to predict and are dependent on the type of waste the landfill accepts, EDGB proposed based on MDEQ request to test the gas quality on a weekly basis as a preventative



measure and to provide data for proper quantification. In addition, EDGB also tested gas quality on a monthly basis using an outside laboratory.

From May 22, 2018 through November 27, 2018 the facility diligently collected and reported sulfur test data to the MDEQ to monitor the conditions at the site. During this time, a Draeger sample was consistently pulled for analysis weekly, and a lab sample was analysed each month by a third party. Around September 2018, sulfur levels from both test sources dropped gradually from the high concentrations seen during previous testing to compliance levels, and maintained those values through November (see Attachments A and B, Weekly and Monthly Sampling Data). This data appeared to indicate the sulfur levels were returning to “normal”, or permit-compliant, conditions.

While EDGB was in the process of testing landfill gas on a monthly and weekly basis and trying to find the reason for the declining TRS concentration, the permit section of the MDEQ continued to work on PTI modification. MDEQ requested additional information multiple times and additional modeling. All this information was provided to Ms. Melissa Byrnes. At the request of MDEQ, EDGB had to withdraw the permit in late November 2018 because no final action was reached and the timeline was exceeding the MDEQ performance deadline of 120 days. EDGB representative contacted Mr. Jeff Rathbun, MDEQ enforcement division, on December 12, 2018 and appraised him of the situation about variability of TRS concentration and the complications this was creating for the PTI modification.

During this same time period, MDEQ requested EDGB to include testing for SO_x in their yearly compliance stack testing. EDGB conducted stack testing on November 28, 2018 and SO_x result indicated levels that were significantly higher than those that had been measured since September 2018. With these sampling efforts in mind, the November 28 stack test results took the facility by surprise.

To investigate this discrepancy, EDGB took samples in mid-December 2018 from four separate locations- the typical sampling location (Location A) and three others. All three other sampling results were over six times that of Location A, consistent with stack testing results. It was determined that Location A drew from stagnant gas. In light of this new information, there has likely been no decrease in sulfur levels since the first VN, and the issue is currently ongoing.

As part of the corrective action to address the Violation Notice, EDGB will re-commit to the action items proposed to the MDEQ following the first Violation Notice. EDGB will re-submit the Permit-to-Install (PTI) application to revise the SO_x emission for the two Caterpillar Engines, as well as revise the Potential to Emit for all seven engines in operation at the facility. EDGB intends to submit the PTI Application by February 7, 2019.

Per the violation notice, the above information was provided to MDEQ by February 7, 2019. If you have any questions, please contact me at (517) 896-4417.



Sincerely,

Energy Developments, LLC

A handwritten signature in blue ink, appearing to read 'Dan Zimmerman', is written in a cursive style.

Dan Zimmerman

Director of North America HSE & Compliance

Enclosure: Attachment A: Weekly Sampling Data
 Attachment B: Monthly Sampling Data
 Attachment C: Violation Letter Dated January 17, 2019

Cc: Courtney Truett – EDGB (Electronically)
 Cornerstone Environmental Group (Electronically)
 Ms. Mary Ann Dolehanty – MDEQ (Electronically)
 Mr. Eduardo Olaguer – MDEQ (Electronically)
 Mr. Christopher Ethridge – MDEQ (Electronically)
 Mr. Brad Myott – MDEQ (Electronically)
 Mr. S. Lee Johnson – Honigman (Electronically)
 Mr. Khaled Mahmood – Cornerstone Engineering (Electronically)

Attachment A

Weekly Gas Sampling Results - Grand Blanc Citizens Disposal (N5991)

Sample #	Date	Time		H2S (ppm)	CH4 (%)	O2 (%)	Technician
1	5/22/2018	14:54		900	50.6	0.12	Chip Cogan
2	*5/31/2018	13:35	<	900	49.6	0.45	Chip Cogan
3	*6/8/2018		<	800	48.8	0.30	Chip Cogan
4	*6/15/2018	16:00		900	50.7	0.33	Tony Saintmarie
5	6/18/2018	14:00	<	1000	51.6	0.18	Chip Cogan
6	6/28/2018	14:00	<	800	50.2	0.40	Chip Cogan
7	*7/9/2018			900	49.4	0.54	Tony Saintmarie
8	*7/12/2018		<	1000	50.0	0.42	Tony Saintmarie
9	*7/19/2018		<	800	48.5	0.50	Tony Saintmarie
10	7/23/2018	7:20	<	800	48.0	0.54	Tony Saintmarie
11	8/1/2018	9:06		800	48.3	0.64	Tony Saintmarie
12	8/8/2018		<	900	49.0	0.84	Tony Saintmarie
13	8/15/2018	16:00		900	50.7	0.33	Tony Saintmarie
14	8/23/2018			900	45.8	0.39	Tony Saintmarie
15	8/27/2018	15:20	<	700	47.2	0.72	Tony Saintmarie
16	*9/5/2018			700	47.3	1.01	Tony Saintmarie
17	9/12/2018	13:45	<	400	47.9	0.73	Tony Saintmarie
18	9/21/2018	9:20	<	600	49.7	0.62	Tony Saintmarie
19	9/26/2018	8:00	<	500	47.8	0.84	Tony Saintmarie
20	10/4/2018	12:40		200	47.8	0.75	Tony Saintmarie
21	10/10/2018	13:30		400	49.1	0.62	Tony Saintmarie
22	10/19/2018	10:33	<	250	47.1	0.54	Tony Saintmarie
23	10/23/2018			200	44.6	0.78	Tony Saintmarie
24	10/31/2018	15:30	<	200	47.2	0.69	Tony Saintmarie
25	11/13/2018		<	100	46.9	0.84	Tony Saintmarie
26	11/22/2018		<	100	48.4	0.71	Tony Saintmarie
27	11/27/2018	14:00	<	20	-	-	Tony Saintmarie
		min		20	44.6	0.12	
		max		1000	51.6	1.01	
		Average		617	48.5	0.57	

*sample date assumed from date email sent

Attachment B

Monthly Gas Sampling Results - Grand Blanc Citizens Disposal (N5991)

Sample #	Date	H2S (ppm)	CH4 (%)	O2 (%)	Technician
1A	3/26/2018	1080	40.9	4.37	Analytical Solutions, Inc.
1B		1111	50.4	0.686	
1C		1114	50.6	0.694	
2A	6/6/2018	762.4	N/A	N/A	Data Analysis Technologies, Inc.
2B		818	42.8	6.46	
2C		827	N/A	N/A	
3A	7/23/2018	965.6	N/A	N/A	Data Analysis Technologies, Inc.
3B (3A Dup.)		955	49.35	0.83	
3C		1053.2	50.09	0.62	
3D		893.6	N/A	N/A	
4A	8/23/2018	904.2	N/A	N/A	Data Analysis Technologies, Inc.
4B		875.8	N/A	N/A	
4C (4B Dup.)		925.6	49.74	0	
4D		978.6	N/A	N/A	
5A	9/18/2018	639.4	N/A	N/A	Data Analysis Technologies, Inc.
5B (5A Dup.)		606.8	N/A	N/A	
5C		783.4	50.27	1.11	
5D		808	N/A	N/A	
6A	10/23/2018	137.5	N/A	N/A	Data Analysis Technologies, Inc.
6C		239	N/A	N/A	
6D		291.3	45.65	2.36	
	min	138	41	0	
	max	1114	51	6	
	Average	799	48	2	



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

January 17, 2019

Mr. Dan Zimmerman
Director of OHS and Compliance
Energy Developments, LLC
608 South Washington Avenue
Lansing, Michigan 48933

SRN: N5991, Genesee County

Dear Mr. Zimmerman:

SECOND VIOLATION NOTICE

On January 11, 2019, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), received a stack test report on emissions of carbon monoxide (CO), nitrogen oxides (NOx), sulfur oxides (SOx) and volatile organic compounds (VOC) from EUENGINE6 and EUENGINE7. The testing was performed on November 28, 2018, at Energy Developments of Grand Blanc, LLC located at Citizens Disposal, Incorporated, 2361 West Grand Blanc Road, Grand Blanc. The purpose of the test was to determine compliance with the emission limits in Renewable Operating Permit (ROP) number MI-ROP-N5991-2016.

The results in the stack test report indicate the following violation:

Process Description	Rule/Permit Condition Violated	Comments
Two Caterpillar G3520, 2,233 hp, landfill gas-fired, lean burn, spark ignition (SI), reciprocating internal combustion engines (RICE) identified as EUENGINE6 and EUENGINE7.	Special Condition (SC) I.1 which limits each engine to 1.7 lb/hr of SOx. (R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))	The test results received show emissions of 5.44 lb/hr of SO ₂ from EUENGINE6 and 5.16 lb/hr of SO ₂ from EUENGINE7 both in excess of the emissions limit.

The stack testing results indicate that the exceedance of the permit limit of 1.7 lb/hr of SOx for each engine remains an ongoing violation of SC I.1 of FGENGINES in ROP No. MI-ROP-N5991-2016. The first violation notice dated March 28, 2018, estimated emissions at 3.26 lb/hr of SOx from EUENGINE6 and 3.22 lb/hr of SOx from EUENGINE7 both in excess of the emissions limit, and were based on gas samples that were collected on May 31, 2016. Actual emissions of SOx from EUENGINE6 and EUENGINE7 are now estimated at 46.4 tons per year (tpy) based on the results of the recent stack testing.

Mr. Dan Zimmerman
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AQD staff have advised you that, at a minimum, this is a violation of Rule 201 (R 336.1201) of the administrative rules promulgated under Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by February 7, 2019, (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to the DEQ, AQD, Lansing District, at 525 West Allegan, 1 South, P.O. Box 30242, Lansing, Michigan 48909 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at the DEQ, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If you believe 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 violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Julie L. Brunner, P.E.
Senior Environmental Engineer
Air Quality Division
517-275-0415

cc: Ms. Mary Ann Dolehanty, DEQ
Dr. Eduardo Olaguer, DEQ
Mr. Christopher Ethridge, DEQ
Ms. Jenine Camilleri, DEQ
Mr. Brad Myott, DEQ