



November 4, 2020

Ms. Diane Kavanaugh-Vetort  
Michigan Department of Environment, Great Lakes, and Energy  
Jackson District Office  
Jackson State Office Building  
301 Louis Glick Highway  
Jackson, Michigan 49201

Subject: **Green for Life Environmental (GFL)<sup>1</sup> - Arbor Hills Landfill, Inc.**  
Response to October 14, 2020 Violation Notice (1 of 2)

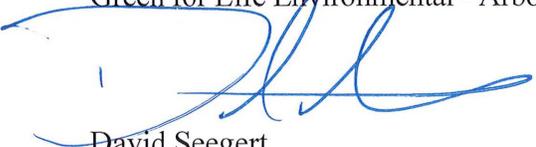
Dear Ms. Kavanaugh-Vetort:

A violation notice (VN) issued by Department of Environment, Great Lakes and Energy (EGLE) dated October 14, 2020 was received by GFL – Arbor Hills Landfill, Inc. (f/k/a Advanced Disposal Arbor Hills Landfill, Inc.) in Northville, Michigan.

Attached please find a written response to each of the issues listed in the VN. The response includes the date and duration of the issue, the cause, corrective actions taken initially and steps to prevent a reoccurrence.

If you have any questions regarding this submittal, please contact me at (317) 452-3032.

Sincerely,  
Green for Life Environmental - Arbor Hills Landfill, Inc.



David Seegert  
General Manager

Cc: Ms. Jenine Camilleri, AQD EGLE Enforcement Unit Supervisor

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<sup>1</sup> Effective October 30, 2020, the new site owner is GFL Environmental, Inc.

## **BACKGROUND**

Green for Life Arbor Hills Landfill, Inc. (“Arbor Hills”) is an active municipal solid waste landfill operating in Washtenaw County, Michigan. The facility is subject to 40 CFR 60 Subpart WWW (the Landfill NSPS) and 40 CFR 63 Subpart AAAA (the Landfill NESHAP). An active gas collection and control system (GCCS) operates at the facility. Extracted landfill gas (LFG) is either sent to the third party-operated Fortistar Gas-to-Energy Plant for combustion in 4 gas turbines (3 of which are connected to heat recovery duct burners) or is controlled on-site by combustion in landfill-owned flares. These include two enclosed flares and one utility flare.

### **Dates of Event/Explanation of Causes/Duration:**

On September 26, 2020 at approximately 4:45 PM, the 3-hour average combustion temperature for enclosed flare 392 (a.k.a Zink Flare, East Flare) was more than 28 degrees C. below the operating temperature established during the most recent performance test (12/19/19). This condition continued until approximately 6:23 PM on September 26, 2020. The total duration was 1 hour 38 minutes.

This issue was discovered by the site on September 29, 2020 when the flare data from the weekend was reviewed by the facility, and a report was run to calculate the three-hour average. EGLE was notified verbally and via email on September 30, 2020 with a follow-up letter submitted to EGLE on October 7, 2020.

The VN acknowledges that the October 7, 2020 deviation notification letter submitted to EGLE included a detailed description of: the dates the alleged violations occurred, an explanation of the causes and duration of the alleged violations, whether the alleged violations are ongoing, a summary of the actions that have been taken and are proposed to be taken to correct the alleged violations and the dates by which these actions will take place, and what steps are being taken to prevent a reoccurrence. A copy of the October 7, 2020 deviation notification letter is attached.

### **Response to the Violation Notice:**

For clarity, the Department’s comments appear below in italic type along with the responses to the issues in the order that they appeared in the VN.

*Item 1: PTI No. 79-17 Condition III.5.a., WWW 40 CFR 60.752(b)(2)(iii)(B)(2), AAAA 40 CFR 63.1955(a), Comment: Operated flares outside of temperature range established during the most recent performance stack test.*

**Response:**

Enclosed flare 392 is designed to operate to meet the requirements of PTI No. 79-17 Condition III.5.a., WWW 40 CFR 60.752(b)(2)(iii)(B)(2), and AAAA 40 CFR 63.1955(a). Unfortunately, as noted in the October 7, 2020 letter provided as Attachment 1, a multitude of conditions occurred simultaneously that could not be overcome by the process control program in place at the time of the incident resulting in a reportable permit deviation. The control program was updated thereafter to address the multiple combined conditions that resulted in the 1-hour 38-minute deviation from the 3-hour temperature requirement in the site's permit.

***Item 2: PTI No. 79-17 Condition III.6, WWW 40 CFR 60.755(e), AAAA 40 CFR 63.1955(a);***  
***Comment: Period of start-up, shutdown or malfunction duration exceeded one hour.***

**Response:**

PTI No. 79-17 Condition III.6 states flares shall be operated at all times when emissions may be vented to them. Enclosed Flare 392 was in operation during this time and there was no free venting of landfill gas. Therefore, the flare could not have violated this condition. In addition, the definition of malfunction under the General provisions of the NESHAP states:

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Enclosed Flare 392 did not malfunction as that term is defined. The design and operation of the louvers to maintain flare temperature via PID loop process control is consistent with standard industry practice. Several factors occurred simultaneously to create the conditions that contributed to the observed low 3-hour average temperatures, none of which can be considered a malfunction or a failure of the equipment. Therefore, although the event persisted for greater than one hour, it could not have violated these specific conditions.

***Item 3: PTI No. 79-17 Condition VI.2, WWW 40 CFR 60.758(c), AAAA 40 CFR 63.1975;***  
***Comment: Exceedance of temperature minimum established during the last stack test for more than 1 hour.***

**Response:**

PTI No. 79-17 Condition VI.2 and 40 CFR 60.758(c) are recordkeeping provisions for which the site has maintained records pertaining to the event. In addition, 40 CFR 63.1975 describes how to calculate the 3-hour block average used demonstrate compliance; a provision that the site

completed. Therefore, the site could not have violated these specific conditions because it maintained records and completed calculations as required per the rules.

***Item 4:*** *R336.1910 (Rule 910); Comment: An air-cleaning device shall be installed, maintained and operated in a satisfactory manner and in accordance with these rules and existing law.*

**Response:** Arbor Hills has installed, maintains and operates the three flares (a.k.a. “air cleaning devices”) in accordance with manufacturer’s recommendations and good engineering practice.

**Attachment 1**

**October 7, 2020 Deviation Notification Letter**



October 7, 2020

Ms. Diane Kavanaugh-Vetort  
Michigan Department of Environment Great Lakes and Energy  
Jackson District Office  
Jackson State Office Building  
301 Louis Glick Highway  
Jackson, Michigan 49201

RE: **Arbor Hills Landfill, Inc. - Advanced Disposal Services**  
MI-ROP-N2688-2011, SRN N2688

Subject: Written Notification of an Abnormal Condition, Start-up, Shutdown, or  
Malfunction as Required by Rule 336.1912

Dear Ms. Kavanaugh-Vetort:

Arbor Hills Landfill, Inc. - Advanced Disposal Services (Arbor Hills) is hereby providing written notification of abnormal conditions as required by the facility's Renewable Operating Permit (ROP) and State of Michigan Rule 336.1912. On September 26, 2020 at approximately 4:45 PM, enclosed flare 392 (a.k.a Zink Flare, East Flare) exhibited 3-hour average combustion temperatures more than 28 deg C. below the operating temperature established during the most recent performance test (12/19/19). This condition continued until approximately 6:23 PM on September 26, 2020. The total duration was 1 hour 38 minutes. Please see Attachment 1 for the rolling three-hour average temperature report for this flare.

This issue was discovered by the site on September 29, 2020 when the flare data from the weekend was reviewed by Advanced, and a report was run to calculate the three-hour average. EGLE was notified verbally and via email on September 30, 2020.

The following factors contributed to this event as described below:

1. Flare 393 (open flare) was operating and shut down at approximately 7:25 AM on September 26, 2020. It was the only flare in operation at the time, which is the default programming when the gas to energy plant is operating. See Attachment 2 for the Flare Daily Report.
2. The open flare shutdown appears to have occurred because of low flow although no alarm notifications were issued. The log data indicates that gas flow was near the low flow fault threshold (less than 500 cfm for 5 minutes) of Flare 393 during the period just before the shutdown.

3. At low flow conditions, the vacuum setpoint will trigger a shutdown and initiate a restart when vacuum reaches the start value. The control valve low flow setpoint was 300 cfm.
4. The automatic restart sequence was triggered but Flare 392 began operation instead. This is by design for situations such as this (a faulted or disabled unit). We believe that Flare 393 was in fault at the same time vacuum control triggered the reset.
5. Upon startup, Flare 392 was able to attain the proper combustion temperature set point and maintained that for several hours before the event occurred.
6. Data records indicate that the flow rate fluctuated from the period before and during the event ranging from a low of 575 cfm to a high of 1,704 cfm. The median flow rate was 1,133 cfm. Flare 392 is programmed to operate while gas flow is above 1,000 cfm.
7. The flow rate fluctuation also means that heat input varied which in turn forces the louvers to compensate to maintain temperature which is normal for enclosed flares. Flare 392 has four automatic control louvers that were recently installed. The louvers were checked and were functioning normally.
8. The louvers are programmed to maintain optimum air flow for stable flame and temperature control and as such have different travel limits. Two of the louvers (AB) had travel ranges extending from 0 to 100% open while the other two (CD) were set at 10 to 80%.

At flow conditions near the low end of the operating range of Flare 392, the louvers must close to maintain temperature. We believe that at the low flow (low heat input) conditions during this event, the louvers could not close enough to maintain the setpoint temperature. Further, we believe that the fluctuation in flow contributed to the issue because during higher heat input the louvers must open to reduce temperature and the louvers could not react fast enough to maintain temperature when the heat input dropped.

To provide consistent low flow shutoffs amongst the flares and control valve, a common setpoint was created. This will ensure that if one low flow shutdown is changed, all similar setpoints will track to that change. The result will keep the flares from faulting before a controlled stop is initiated.

#### Corrective Action Plan

To prevent reoccurrence of this event, the facility has changed the range of louver motion from 10 to 80% to 5 to 90% for louvers C and D. We believe that this change will allow the unit to operate optimally at the low flow conditions observed and will allow the louvers to close sufficiently to maintain the required temperature. In addition, the operating setpoint was increased to improve system response. The ramp rate (the speed at which the louvers react) was increased to provide faster louver response when temperatures fall below the setpoint. Finally, the low temperature shutdown was changed to a rolling average temperature minus 25 deg. F for an hour criteria to ensure that the unit does not operate more than 28 deg C. below the operating temperature over a 3-hour block time period.

Please let us know if you require any other additional information this event. A responsible official certification form is provided in Attachment 3.

Sincerely,

**ARBOR HILLS LANDFILL, INC. - ADVANCED DISPOSAL SERVICES**



David Seegert  
General Manager

cc: D. Oleniacz-EIL

Attachments:

Attachment 1 – Flare 392 Rolling 3-Hour Average Temperature Report

Attachment 2 – September 26, 2020 Flare Daily Report

Attachment 3 – Responsible Official Certification

**Attachment 1**

**Enclosed Flare 392 Rolling Three-Hour Average Temperature Report**

Client Advanced Disposal  
 Site: Arbor Hills  
 Reportable Unit: Flare 392



Temperature Temperature-Op Deg. F  
 Flow Flow Rate Raw Data SCFM  
 Threshold Value 1 SCFM  
 Missing data criteria 15 Minutes  
 Time Frame 09/26/2020 0:00 09/27/2020 0:00

Compliance Temperature = 1345 Deg F

### 3 Hours rolling average temperature report

Date	Time Zone	Flow Rate Raw Data (SCFM)	Temperature re-Op (Deg. F)	Average temperature (Deg. F)
09/26/20 00:11:00	EDT	0.0	55.4	ND
09/26/20 00:25:00	EDT	0.0	54.9	ND
09/26/20 00:39:00	EDT	0.0	54.4	ND
09/26/20 00:53:00	EDT	0.0	53.9	ND
09/26/20 01:07:00	EDT	0.0	53.4	ND
09/26/20 01:21:00	EDT	0.0	53.4	ND
09/26/20 01:35:00	EDT	0.0	53.4	ND
09/26/20 01:49:00	EDT	0.0	53.4	ND
09/26/20 02:03:00	EDT	0.0	52.9	ND
09/26/20 02:17:00	EDT	0.0	52.4	ND
09/26/20 02:31:00	EDT	0.0	52.4	ND
09/26/20 02:45:00	EDT	0.0	52.4	ND
09/26/20 02:59:00	EDT	0.0	51.4	ND
09/26/20 03:13:00	EDT	0.0	51.4	ND
09/26/20 03:27:00	EDT	0.0	51.9	ND
09/26/20 03:41:00	EDT	0.0	51.9	ND
09/26/20 03:55:00	EDT	0.0	51.9	ND

Generation Date: 10/6/2020 12:00:19 PM

Client Advanced Disposal

Site: Arbor Hills

Reportable Unit: Flare 392



Date	Time Zone	Flow Rate Raw Data (SCFM)	Temperature re-Op (Deg. F)	Average temperature (Deg. F)
09/26/20 04:09:00	EDT	0.0	51.4	ND
09/26/20 04:23:00	EDT	0.0	50.4	ND
09/26/20 04:37:00	EDT	0.0	49.9	ND
09/26/20 04:51:00	EDT	0.0	49.9	ND
09/26/20 05:05:00	EDT	0.0	49.9	ND
09/26/20 05:19:00	EDT	0.0	50.4	ND
09/26/20 05:33:00	EDT	0.0	49.9	ND
09/26/20 05:47:00	EDT	0.0	49.9	ND
09/26/20 06:01:00	EDT	0.0	49.4	ND
09/26/20 06:15:00	EDT	0.0	49.4	ND
09/26/20 06:29:00	EDT	0.0	48.9	ND
09/26/20 06:43:00	EDT	0.0	48.9	ND
09/26/20 06:57:00	EDT	0.0	48.4	ND
09/26/20 07:11:00	EDT	0.0	48.4	ND
09/26/20 07:25:00	EDT	0.0	48.4	ND
09/26/20 07:39:00	EDT	0.0	47.9	ND
09/26/20 07:53:00	EDT	0.0	47.9	ND
09/26/20 08:07:00	EDT	0.0	47.9	ND
09/26/20 08:21:00	EDT	0.0	47.9	ND
09/26/20 08:35:00	EDT	0.0	48.4	ND
09/26/20 08:49:00	EDT	1,003.8	1,314.4	ND
09/26/20 09:03:00	EDT	1,459.7	1,670.9	ND
09/26/20 09:17:00	EDT	766.6	1,376.9	ND
09/26/20 09:31:00	EDT	958.1	1,567.9	ND
09/26/20 09:45:00	EDT	776.9	1,520.4	ND
09/26/20 09:59:00	EDT	575.0	1,333.4	ND
09/26/20 10:13:00	EDT	1,075.6	1,371.4	ND
09/26/20 10:27:00	EDT	1,046.6	1,373.9	ND
09/26/20 10:41:00	EDT	852.5	1,443.4	ND
09/26/20 10:55:00	EDT	707.2	1,382.4	ND

Generation Date: 10/6/2020 12:00:19 PM

Client Advanced Disposal

Site: Arbor Hills

Reportable Unit: Flare 392



Date	Time Zone	Flow Rate Raw Data (SCFM)	Temperature re-Op (Deg. F)	Average temperature (Deg. F)
09/26/20 11:09:00	EDT	1,031.3	1,366.9	ND
09/26/20 11:23:00	EDT	1,051.6	1,366.9	ND
09/26/20 11:37:00	EDT	1,139.7	1,353.4	ND
09/26/20 11:51:00	EDT	896.6	1,389.9	1,417.0
09/26/20 12:05:00	EDT	1,038.8	1,400.4	1,423.0
09/26/20 12:19:00	EDT	1,138.8	1,387.4	1,403.0
09/26/20 12:33:00	EDT	1,155.3	1,257.9	1,394.0
09/26/20 12:47:00	EDT	1,015.6	1,399.9	1,382.0
09/26/20 13:01:00	EDT	1,116.9	1,513.9	1,382.0
09/26/20 13:15:00	EDT	1,144.1	1,573.4	1,399.0
09/26/20 13:29:00	EDT	1,012.8	1,389.4	1,400.0
09/26/20 13:43:00	EDT	1,129.4	1,211.4	1,388.0
09/26/20 13:57:00	EDT	1,174.7	1,385.4	1,384.0
09/26/20 14:11:00	EDT	1,096.6	1,544.9	1,396.0
09/26/20 14:25:00	EDT	1,465.6	1,566.9	1,410.0
09/26/20 14:39:00	EDT	1,570.9	1,332.9	1,408.0
09/26/20 14:53:00	EDT	1,704.4	1,159.4	1,394.0
09/26/20 15:07:00	EDT	1,512.2	1,085.4	1,372.0
09/26/20 15:21:00	EDT	1,113.8	1,171.4	1,356.0
09/26/20 15:35:00	EDT	1,551.9	1,283.4	1,348.0
09/26/20 15:49:00	EDT	1,375.6	1,447.4	1,362.0
09/26/20 16:03:00	EDT	1,606.9	1,624.9	1,378.0
09/26/20 16:17:00	EDT	1,106.6	1,368.9	1,368.0
09/26/20 16:31:00	EDT	1,637.8	1,266.4	1,346.0
09/26/20 16:45:00	EDT	1,659.4	1,161.4	1,329.0
09/26/20 16:59:00	EDT	1,140.9	1,085.9	1,320.0
09/26/20 17:13:00	EDT	1,378.1	1,153.4	1,304.0
09/26/20 17:27:00	EDT	1,405.6	1,789.9	1,321.0
09/26/20 17:41:00	EDT	1,136.6	1,576.4	1,322.0
09/26/20 17:55:00	EDT	1,100.0	1,316.9	1,321.0

Generation Date: 10/6/2020 12:00:19 PM

Client Advanced Disposal

Site: Arbor Hills

Reportable Unit: Flare 392



Date	Time Zone	Flow Rate Raw Data (SCFM)	Temperature re-Op (Deg. F)	Average temperature (Deg. F)
09/26/20 18:09:00	EDT	1,560.6	1,182.9	1,323.0
09/26/20 18:23:00	EDT	1,435.0	1,207.9	1,331.0
09/26/20 18:37:00	EDT	1,191.6	1,705.4	1,369.0
09/26/20 18:51:00	EDT	928.1	1,460.4	1,382.0
09/26/20 19:05:00	EDT	1,018.8	1,261.9	1,369.0
09/26/20 19:19:00	EDT	1,129.1	1,300.4	1,346.0
09/26/20 19:33:00	EDT	1,090.6	1,473.9	1,353.0
09/26/20 19:47:00	EDT	1,036.3	1,556.4	1,374.0
09/26/20 20:01:00	EDT	1,093.4	1,489.4	1,397.0
09/26/20 20:15:00	EDT	841.3	1,363.9	1,417.0
09/26/20 20:29:00	EDT	1,083.8	1,245.4	1,424.0
09/26/20 20:43:00	EDT	1,244.7	1,431.9	1,398.0
09/26/20 20:57:00	EDT	1,149.7	1,452.9	1,389.0
09/26/20 21:11:00	EDT	976.9	1,551.9	1,406.0
09/26/20 21:25:00	EDT	1,055.0	1,469.4	1,427.0
09/26/20 21:39:00	EDT	1,046.9	1,246.4	1,429.0
09/26/20 21:53:00	EDT	1,092.2	1,294.4	1,400.0
09/26/20 22:07:00	EDT	1,073.8	1,555.4	1,407.0
09/26/20 22:21:00	EDT	1,119.4	1,516.9	1,425.0
09/26/20 22:35:00	EDT	984.4	1,336.9	1,428.0
09/26/20 22:49:00	EDT	906.9	1,196.4	1,408.0
09/26/20 23:03:00	EDT	1,123.4	1,252.9	1,386.0
09/26/20 23:17:00	EDT	1,059.7	1,438.4	1,382.0
09/26/20 23:31:00	EDT	1,120.9	1,393.4	1,385.0
09/26/20 23:45:00	EDT	890.6	1,495.9	1,402.0
09/26/20 23:59:00	EDT	929.1	1,536.9	ND

Generation Date: 10/6/2020 12:00:19 PM

**Attachment 2**

**All Flare Data September 26, 2020**

ate & Time	Stam	Landfill Vacuum pressure set point	Landfill Vacuum Pressure	Extraction Blower Discharge Pressure	Extraction Blower Discharge Temperature	Flare 391 Waste Temperature TE 391 (deg F)	Flare 391 Gas Flow FIT 391 (SCFM)	Flare 392 Waste Temperature TE 392 (deg F)	Flare 392 Gas Flow FT 392 (SCFM)	Flare 393 Pilot Temperature TE 993 (deg F)	Flare 393 Waste Temperature TE 393 (deg F)	Flare 393 Gas Flow FT 393 (SCFM)	Combined Flare Gas Flow FT 39X All 3 (SCFM)
9/26/2020 0:11		-76.00	-75.69	26.48	146.90	63.08	0.00	55.44	0.00	218.00	1508.60	565.31	565.31
9/26/2020 0:25		-76.00	-75.95	28.38	147.70	63.08	0.00	54.94	0.00	218.40	1420.20	597.50	597.50
9/26/2020 0:39		-76.00	-75.68	29.05	148.20	63.08	0.00	54.44	0.00	235.70	1430.80	590.94	590.94
9/26/2020 0:53		-76.00	-74.88	27.52	148.70	62.58	0.00	53.94	0.00	228.30	1463.70	575.00	575.00
9/26/2020 1:07		-76.00	-76.39	27.07	149.00	62.58	0.00	53.44	0.00	218.80	1385.90	727.81	727.81
9/26/2020 1:21		-76.00	-76.81	27.43	148.10	62.58	0.00	53.44	0.00	213.80	1384.00	780.94	780.94
9/26/2020 1:35		-76.00	-78.59	27.31	148.70	62.58	0.00	53.44	0.00	213.80	1384.00	780.94	780.94
9/26/2020 1:49		-76.00	-74.14	29.00	148.00	62.08	0.00	53.44	0.00	216.90	1521.50	488.44	488.44
9/26/2020 2:03		-76.00	-76.48	28.23	147.60	62.08	0.00	52.94	0.00	212.50	1391.40	713.44	713.44
9/26/2020 2:17		-76.00	-77.31	30.36	147.40	62.08	0.00	52.44	0.00	222.00	1411.00	691.88	691.88
9/26/2020 2:31		-76.00	-77.86	28.89	147.50	61.58	0.00	52.44	0.00	222.00	1395.00	738.38	738.38
9/26/2020 2:45		-76.00	-75.46	29.52	147.10	62.08	0.00	52.44	0.00	222.00	1395.00	738.38	738.38
9/26/2020 2:59		-76.00	-76.95	26.81	147.70	61.08	0.00	51.44	0.00	327.80	1428.00	336.58	336.58
9/26/2020 3:13		-76.00	-75.83	27.32	148.00	61.08	0.00	51.44	0.00	268.80	1450.80	475.31	475.31
9/26/2020 3:27		-76.00	-75.10	28.17	148.40	61.08	0.00	51.94	0.00	254.40	1468.80	431.56	431.56
9/26/2020 3:41		-76.00	-75.32	28.27	148.50	61.08	0.00	51.94	0.00	216.00	1468.80	486.25	486.25
9/26/2020 3:55		-76.00	-74.79	28.65	148.80	61.08	0.00	51.94	0.00	198.10	1444.70	501.88	501.88
9/26/2020 4:09		-76.00	-76.06	28.49	149.20	60.58	0.00	51.44	0.00	203.00	1411.00	560.00	560.00
9/26/2020 4:23		-76.00	-75.08	28.10	149.20	60.08	0.00	50.44	0.00	203.00	1441.80	547.50	547.50
9/26/2020 4:37		-76.00	-77.11	29.12	149.30	59.58	0.00	49.94	0.00	201.40	1450.60	477.50	477.50
9/26/2020 4:51		-76.00	-76.61	24.61	148.40	59.58	0.00	49.94	0.00	199.40	1380.00	728.13	728.13
9/26/2020 5:05		-76.00	-74.75	28.91	148.00	60.08	0.00	49.94	0.00	195.40	1479.50	600.63	600.63
9/26/2020 5:19		-76.00	-77.18	28.39	148.30	60.08	0.00	50.44	0.00	195.40	1486.90	393.13	393.13
9/26/2020 5:33		-76.00	-76.01	28.63	148.00	60.08	0.00	49.94	0.00	194.10	1422.90	707.19	707.19
9/26/2020 5:47		-76.00	-75.68	28.41	147.20	59.58	0.00	49.94	0.00	201.20	1467.80	401.56	401.56
9/26/2020 6:01		-76.00	-76.42	27.45	147.80	59.58	0.00	48.44	0.00	195.40	1399.40	712.81	712.81
9/26/2020 6:15		-76.00	-75.53	28.58	147.10	59.08	0.00	48.44	0.00	196.80	1498.80	412.81	412.81
9/26/2020 6:29		-76.00	-75.29	28.77	147.60	59.08	0.00	48.94	0.00	206.60	1398.50	615.63	615.63
9/26/2020 6:43		-76.00	-74.15	28.23	147.00	58.58	0.00	48.94	0.00	197.90	1603.59	355.31	355.31
9/26/2020 6:57		-76.00	-77.70	27.26	147.70	58.58	0.00	48.44	0.00	214.50	1418.50	586.56	586.56
9/26/2020 7:11		-76.00	-76.01	27.37	147.40	58.58	0.00	48.44	0.00	210.40	1487.10	421.88	421.88
9/26/2020 7:25		-76.00	-75.78	27.78	147.40	58.58	0.00	48.44	0.00	163.30	1454.30	0.00	0.00
9/26/2020 7:39		-71.60	-71.69	0.00	135.10	58.08	0.00	47.94	0.00	87.50	95.40	0.00	0.00
9/26/2020 7:53		-71.90	-71.87	0.00	114.00	58.08	0.00	47.94	0.00	63.90	67.70	0.00	0.00
9/26/2020 8:07		-71.10	-71.12	0.00	113.40	58.08	0.00	47.94	0.00	60.30	83.80	0.00	0.00
9/26/2020 8:21		-71.40	-71.36	0.00	110.30	58.08	0.00	47.94	0.00	60.30	64.10	0.00	0.00
9/26/2020 8:35		-69.90	-69.86	0.00	107.40	58.08	0.00	46.44	0.00	59.60	65.80	0.00	1003.75
9/26/2020 8:49		-76.00	-78.00	28.67	134.50	59.08	0.00	1314.44	1003.75	60.00	65.80	0.00	1459.69
9/26/2020 9:03		-76.00	-80.63	21.56	104.10	58.58	0.00	1670.94	1459.69	60.70	65.90	0.00	766.58
9/26/2020 9:17		-76.00	-75.44	24.92	118.60	60.08	0.00	1376.94	766.58	60.50	65.50	0.00	958.13
9/26/2020 9:31		-76.00	-74.46	28.19	130.60	61.08	0.00	1567.94	958.13	60.80	67.00	0.00	776.88
9/26/2020 9:45		-76.00	-74.70	29.22	136.30	62.08	0.00	1520.44	776.88	62.30	72.00	0.00	575.00
9/26/2020 9:59		-76.00	-74.83	32.59	137.80	63.58	0.00	1333.44	575.00	63.80	72.00	0.00	1075.63
9/26/2020 10:13		-76.00	-76.57	26.05	138.40	65.08	0.00	1371.44	1075.63	65.70	72.90	0.00	1046.58
9/26/2020 10:27		-76.00	-77.30	24.20	138.80	67.08	0.00	1373.94	1046.58	68.10	75.20	0.00	852.50
9/26/2020 10:41		-76.00	-74.98	28.99	139.50	68.08	0.00	1443.44	852.50	69.40	76.80	0.00	707.19
9/26/2020 10:55		-76.00	-75.48	30.88	140.00	70.08	0.00	1382.44	707.19	68.80	75.80	0.00	1031.25
9/26/2020 11:09		-76.00	-75.73	25.43	140.00	71.58	0.00	1366.94	1031.25	70.60	77.70	0.00	1051.56
9/26/2020 11:23		-76.00	-76.81	25.05	139.90	72.58	0.00	1366.94	1051.56	75.00	81.80	0.00	1139.88
9/26/2020 11:37		-76.00	-76.70	22.85	140.30	74.58	0.00	1353.44	1139.88	75.20	83.00	0.00	896.56
9/26/2020 11:51		-76.00	-75.99	27.92	140.40	75.58	0.00	1368.94	896.56	79.60	86.00	0.00	1036.75
9/26/2020 12:05		-76.00	-76.25	25.77	140.50	75.58	0.00	1400.44	1036.75	73.80	81.20	0.00	1138.75
9/26/2020 12:19		-76.00	-75.81	22.63	140.60	76.58	0.00	1387.44	1138.75	78.50	85.70	0.00	1155.31
9/26/2020 12:33		-76.00	-76.43	22.30	140.30	77.58	0.00	1257.94	1155.31	73.70	81.80	0.00	1015.63
9/26/2020 12:47		-76.00	-75.83	26.46	140.80	77.58	0.00	1369.94	1015.63	74.10	81.60	0.00	1166.38
9/26/2020 13:01		-76.00	-76.24	22.80	141.20	78.58	0.00	1613.94	1166.38	77.30	86.50	0.00	1144.06
9/26/2020 13:15		-76.00	-76.71	25.18	140.80	80.58	0.00	1573.44	1144.06	77.50	86.80	0.00	1012.81
9/26/2020 13:29		-76.00	-76.89	27.64	140.90	80.58	0.00	1388.94	1012.81	77.00	86.60	0.00	1128.38
9/26/2020 13:43		-76.00	-76.29	22.98	142.00	80.58	0.00	1211.44	1128.38	77.20	85.60	0.00	1174.69
9/26/2020 13:57		-76.00	-75.21	22.97	141.50	81.58	0.00	1385.44	1174.69	81.20	90.40	0.00	1096.58
9/26/2020 14:11		-76.00	-76.48	29.03	142.30	82.58	0.00	1544.94	1096.58	87.10	100.40	0.00	1465.63
9/26/2020 14:25		-76.00	-75.89	28.55	144.80	82.08	0.00	1566.94	1465.63	79.20	87.70	0.00	1570.94
9/26/2020 14:39		-76.00	-76.66	16.44	148.90	83.08	0.00	1332.94	1570.94	81.00	89.60	0.00	1704.38
9/26/2020 14:53		-76.00	-76.71	23.98	151.20	84.58	0.00	1156.44	1704.38	83.60	92.20	0.00	1512.19
9/26/2020 15:07		-76.00	-76.42	19.06	151.30	83.08	0.00	1085.44	1512.19	79.20	85.80	0.00	1113.75
9/26/2020 15:21		-76.00	-74.43	29.07	152.80	82.58	0.00	1171.44	1113.75	77.80	85.00	0.00	1551.88
9/26/2020 15:35		-76.00	-76.19	16.27	151.20	82.58	0.00	1283.44	1551.88	78.20	83.80	0.00	1375.63
9/26/2020 15:49		-76.00	-75.89	17.96	151.80	82.58	0.00	1447.44	1375.63	79.10	86.30	0.00	1606.38
9/26/2020 16:03		-76.00	-74.92	25.35	154.10	83.58	0.00	1624.94	1606.38	81.70	89.10	0.00	1106.58
9/26/2020 16:17		-76.00	-74.23	27.52	149.70	83.58	0.00	1366.94	1106.58	82.20	86.70	0.00	1637.81
9/26/2020 16:31		-76.00	-74.58	16.70	154.20	82.58	0.00	1265.44	1637.81	81.20	87.30	0.00	1658.38
9/26/2020 16:45		-76.00	-76.48	23.06	154.20	82.58	0.00	1161.44	1658.38	80.70	85.40	0.00	1140.94
9/26/2020 16:59		-76.00	-75.63	28.68	153.30	82.08	0.00	1085.94	1140.94	78.00	83.40	0.00	1378.13
9/26/2020 17:13		-76.00	-76.85	23.81	150.80	81.08	0.00	1153.44	1378.13	78.40	83.40	0.00	1405.63
9/26/2020 17:27		-76.00	-75.45	20.05	149.50	81.08	0.00	1789.94	1405.63	77.70	82.90	0.00	1136.56
9/26/2020 17:41		-76.00	-75.81	24.11	147.80	81.08	0.00	1576.44	1136.56	77.90	82.70	0.00	1100.00
9/26/2020 17:55		-76.00	-75.60	31.45	147.50	80.58	0.00	1316.94	1100.00	80.50	85.20	0.00	1560.63
9/26/2020 18:09		-76.00	-77.35	14.45	145.30	79.58	0.00	1182.94	1560.63	77.60	82.20	0.00	1435.00
9/26/2020 18:23		-76.00	-76.45	19.06	146.70	80.58	0.00	1207.94	1435.00	74.80	78.80	0.00	1191.56
9/26/202													

**Attachment 3**  
**Michigan ROP Deviation Form**

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
REPORT CERTIFICATION**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Environmental Quality, Air Quality Division upon request.

Source Name Advanced Disposal Services Arbor Hills Landfill, Inc. County Washtenaw

Source Address 10690 Six Mile Road City Northville

AQD Source ID (SRN) N2688 ROP No. MI-ROP-N2688-2011 ROP Section No. 01 and 02

Please check the appropriate box(es):

**Annual Compliance Certification (Pursuant to Rule 213(4)(c))**

Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_

1. During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.
2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, **EXCEPT** for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

**Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**

Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_

1. During the entire reporting period, **ALL** monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.
2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, **EXCEPT** for the deviations identified on the enclosed deviation report(s).

**Other Report Certification**

Reporting period (provide inclusive dates): From 09/26/20 To 09/26/20

Additional monitoring reports or other applicable documents required by the ROP are attached as described:

Certification required under State of Michigan Rule 336.1912

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

David Seegert

General Manager

567-230-7373

Name of Responsible Official (print or type)

Title

Phone Number

Signature of Responsible Official

10/7/2020  
Date