FORTISTAR Methane Group

Arbor Hills Energy LLC
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March 8, 2019

Mike Kovalchick
Michigan DEQ-AQD
Jackson District Office
301 East Louis Glick Highway
Jackson, MI 49201

VIA OVERNIGHT DELIVERY AND ELECTRONIC MAIL

Subject: Response to Violation Notice, N2688, Washtenaw County (February 1, 2019)
Arbor Hills Landfill, 10690 Six Mile Road, Northville, MI ("NOV")
Arbor Hills Energy ("AHE")

Dear Mr. Kovalchick:

The above-referenced NOV was received via email on February 4, 2019 and requested a response by February 22, 2019. By e-mail message dated February 19, 2019, you agreed to AHE's request to an extension for response to March 8, 2019. AHE's responses are documented on the attached table.

As always, we appreciate the opportunity to provide this response. If the information provided needs to be supplemented, of if you have any questions or concerns, please contact Suparna Chakladar at (951) 833-4153 or Don Ross at (914) 421-5307.

Sincerely,

Anthony J. Falbo
Senior Vice President - Operations
FORTISTAR Methane Group
Arbor Hills Energy LLC

cc: Mary Ann Dolehanty, MDEQ
Jay Olaguer, MDEQ
Christopher Ethridge, MDEQ
Jenine Camilleri, MDEQ
Ambrosia Brown, MDEQ
Kenneth Ruffato, EPA
Sarah Marshall, EPA
Scott Miller, MDEQ
Diane Kavanaugh Vetort, MDEQ
Matt Eugster, Varnum
Tom Kelly, AHE
Don Ross, AHE
Suparna Chakladar, AHE

Arbor Hills Energy LLC - Response to Notice of Violation received on 2/8/19

CONFIDENTIAL DOCUMENT -

Item 1	MDEQ Process Decription (per 2/1/19 NOV)	MDEQ Rule/Permit Condition Violated (per 2/1/19 NOV)	MDEQ Comments (2/1/19 NOV)	Date of Violation	Cause of Violation	Summary of Actions taken or Proposed to correct Violations	Steps taken to prevent recurrence of Violation
1	FGTURBINES-S3 consisting of EUTURBINE1-S3, EUTURBINE2-S3, EUTURBINE3-S3.	ROP, FGTURBINES-S3, Condition I. S02 limits.	October 16-18, 2018 results indicated that SO2 lb/hr exceeded permit limit of 2.9 lb/hr and 12.5 tons per year (tpy) limit for each turbine	October 16-18, 2019	AP-42 Emissions factors were initially utilized to develop emission limits for this source. Following up on recent source testing, modelling and site specific factors results are now being utilized to develop emission limits for the pending permit application.	PTI 110-16 submitted	PTI 110-16 submitted
2	FGDUCTBURNERS-S3 consisting of EUDUCTBURNER1-S3, EUDUCTBURNER2-S3, EUDUCTBURNER3-S3.	ROP, FGDUCTBURNERS-S3, Condition I.	October 16-18, 2018 results indicated that SO2 lb/hr exceeded permit limit of 0.3 lb/hr and 1.5 tpy limit for each duct burner	October 16-18, 2019	AP-42 Emissions factors were initially utilized to develop emission limits for this source. Following up on recent source testing, modelling and site specific factors results are now being utilized to develop emission limits for the pending permit application.	PTI 110-16 submitted	PTI 110-16 submitted
3	EUTURBINE4-S3	ROP, EUTURBINE4-S3 Condition I. 6. SO2 limit.	October 16-18, 2018 results indicated that SO2 lb/hr exceeded permit limit of 0.3 lb/hr and 1.5 tpy limit for each duct burner.	NA	EUTURBINE 4-S3 did not violate permit conditions. Pursuant to Condition I.6, EUTURBINE 4-S3 can demonstrate complaince with either 0.9 lb/MWhr or 0.15 lb/MMBTU. The October 16-18 results establish compliance with the 0.15 lb/MMBTU limit.	N/A	N/A
4	FGTURBINES-S3 and FGDUCTBURNERS-S3	Consent Order 16-2015, Paragraph 9.B.2 Testing.	Failed to complete acceptable performance testing between June 1, 2015 and June 1, 2018 as required by Consent Order 16-2015	June 1, 2018	Wellfield conditions at the time of the initial source testing were determined to be unrepresentative of normal operating conditions. As a result, source testing was rescheduled for October 2018 after wellfield construction had been completed (with MDEQ consent).	Performance testing was rescheduled (with MDEQ consent) and completed.	Performance testing was rescheduled (with MDEQ consent) and completed.
5	FGTURBINES-S3, FGDUCTBURNERS-S3 and EUTURBINE4-S3.	Part 18. Prevention of Significant Deterioration (PSD) of Air Quality. 40 CFR 52.21 and R 336.2802 (Rule 1802), R 336.1201 (Rule 201).	Unpermitted PSD major modification that has resulted in a significant emission increase and a significant net emission increase of SO2 greater than 40 tpy. This also triggers a requirement for a Permit to Install (PTI) permit.	NA	A PSD modification includes "any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase." See 40 CFR 52.21(b)(2). AHE has been permitted to combust LFG pursuant to the terms of its ROP. AHE continues to combust landfill gas and has not implemented any physical change or change in the method of operation that would consitute a modification.	Although the Company disputes that a violation has occurred, it has submitted a PTI application (PTI 110-16) to resolve any potential permitting concerns or compliance issues.	Although the Company disputes that a violation has occurred, it has submitted a PTI application (PTI 110-16) to resolve any potential permitting concerns or compliance issues.
6	FGTURBINES-S3, FGDUCTBURNERS-S3, 10,000-gallon underground diesel storage tank and 3 bypass stacks using during start-up and when heat steam recovery systems are undergong maintenance.	Rule 201-No PTI. Use of diesel fuel is a change in the method of operation from how these turbines were originally permitted, therefore, the usage of diesel fuel would require a modification to the existing permit.	Three turbines (EUTURBINES-S3, EUDUCTBURNERS-S3) are using diesel fuel as an alternate fuel to landfill gas during start-up. This represents reconstructing an emission unit and a meaningful change in the quality and nature of emissions compared to the original permit application for these turbines which failed to describe the process.	N/A	The Company disputes that a violation of Rule 201 has occurred. Rule 201 provides that a person shall not reconstruct or modify any process or process equipment unless a permit that authorizes such action is issued. As the Company has previously notified the MDEQ, diesel fuel has always been used to start the turbines at issue. As a result, there has not been any "reconstruction" or "modification" that would constitute a violation of Rule 201.	N/A	N/A
7	FGTURBINES-S3	ROP, FGTURBINES-S3, Condition VII. 1.,40 CFR, Part 60, Subpart GG; Standards of Performance for Stationary Gas Turbines.	Diesel fuel is being used to start-up the three turbines (EUTURBINES-S3). AHE failed to notify AQD that diesel fuel is being used as an alternate fuel as required by Subpart GG. Furthermore, AHE has been operating under a waiver issued by the US EPA on January 19, 1996 that waived the requirement for daily fuel sampling for sulfur and nitrogen as long as only landfill gas was being fired in the turbines.	N/A	The Company does not believe that supbpart KKKK is applicable for reasons previously discussed with the agency. Based on subsequent communications with MDEQ staff it is our understanding that the MDEQ is no longer alleging a violation of Subpart KKKK (subject to documentation of historic diesel use).	N/A	N/A

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8	FGTURBINES-S3, FGDUCTBURNERS-S3.	40 cfr Part 60, Subpart KKKK; Standards of Performance for Stationary Combustion Turbines.	Unpermitted modifications to this emission unit triggered Subpart KKKK applicability which is not being complied with.	N/A	The Company does not believe that supbpart KKKK is applicable for reasons previously discussed with the agency. Based on subsequent communications with MDEQ staff it is our understanding that the MDEQ is no longer alleging a violation of Subpart KKKK (subject to documentation of historic diesel use).	N/A	N/A
9	EUTREATMENTSYS-S3	ROP, EUTREATMENTSYS-S3, Condition IX- OTHER REQUIREMENTS.	The Preventative Maintenance Plan (PMP) is out of date. Process description does not match Startup, Shutdown and Malfunction Abatement Plan (SSM). It isn't clear what operating parameters are being measured, what the acceptable range is for each operating parameter or specifically what piece of process equipment it pertains to. The PMP needs to be updates/revised including current process flow diagrams added for clarity.	NA	The Company disputes that the PMP was out of date or that a violation occurred. The Company further submits that it implemented a PMP consistent with the requirements of Condition IX(3).	Although the Company disputes that a violation ocurred, AHE will work with MDEQ staff to modify sections of the PMP to provide additional clarification.	Although the Company disputes that a violation ocurred, AHE will work with MDEQ staff to modify sections of the PMP to provide additional clarification.
10	EUTREATMENTSYS-S3	ROP, EUTREATMENTSYS-S3, Condition IX.2., 40CFR, Part63, Subpart AAAA; National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.	SSM Plan does not describe landfill gas venting events that occur when each of the main compressors goes through a shutdown sequence.	NA	The Company has developed and implmented an SSM Plan consistent with the requirements of 40 CFR 63.6. Therefore, the Company disputes that a violation has occurred. Furthermore submits that a modification of an SSM Plan is not required to address any that would not cause a violation of of an applicable pursuant to 40 CR 63.6(e(3). Therefore, the failure to include specific references to landfill gas venting events in the SSM does not constitute a violation.	Although the Company disputes that a violation ocurred, AHE will update the SSM Plan to add a discusion of the compressor shutdown sequence.	Although the Company disputes that a violation ocurred, AHE will update the SSM Plan to add a discusion of the compressor shutdown sequence.
11	EUTREATMENTSYS-S3	ROP, EUTREATMENTSYS-S3, Condition III.2., 40 CFR, Part 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills	Treatment system contains 4 stacks; one each associated with the 4 main compressors that vent to atmosphere generally whenever one of the compressors is turned off to vent residual landfill gas. These vents are not controlled by a flare or other control device.	NA	The Company does not vent residual landfill gasfrom EUTREATMENT SYSTEM except to the extent that treated landfill gas is occassionally vented from pressure relief valves for safety purposes during SSM events (*e.g.* , compressor start-up, shut-down or malfunction).	Emissions from pressure relief valves are managed under SSM Plan	Emissions from pressure relief valves are managed under SSM Plan