



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT
DEVIATION REPORT**

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

This form may be submitted in conjunction with the Renewable Operating Permit Report Certification form (EQP 5736) to report deviations from all general conditions and special conditions in the Renewable Operating (RO) Permit for which deviations required to be reported by Rule 213(3)(c) have occurred. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as described in General Condition No. 22 in the RO Permit and be made available to the Department of Environmental Quality, Air Quality Division, upon request. Items 1 - 8 must be completed for all deviations being reported.

Source Name University of Michigan County Washtenaw

Source Address 1239 Kipke Drive City Ann Arbor

AQD Source ID (SRN) M0675 RO Permit No. MI-ROP-M0675-2014a RO Permit Section No. _____

RO Permit Section Contact Stephen O'Rielly Contact Phone No. 734-763-4642

Reporting Period (provide inclusive dates): From 1/1/17 to 12/31/17

Report Type: Annual Semi Annual Other (Describe) _____

1. Group or Source Wide ID EU-T0260-10	2. Table/Condition No. 1.	3. Date(s) of Occurrence 11/18/2017	4. Previously reported ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 11/27/17 12/4/2017	5. Duration of Deviation 1 hr 7 min
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Shut down unit.		7. Description of Deviation Failed NOx water pump.		
8. Reason for Deviation and Description of Corrective Action Taken Failed NOx water pump. Operations attempted to troubleshoot the issue but was unable to restart flow. Unit was shut down. Solar Turbine determined it was a failed NOx pump which was replaced 11/29/2017				

1. Group or Source Wide ID EU-I0213-02	2. Table/Condition No. VI.1	3. Date(s) of Occurrence 2/5/2016 to 11/17/2017	4. Previously reported ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 11/17/2017	5. Duration of Deviation 1 year 9 months
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Unit running fine, spot check temps., daily check		7. Description of Deviation Temperature was not recorded continuously due to a malfunctioning monitor.		
8. Reason for Deviation and Description of Corrective Action Taken The SD card was pushed in to the monitor too far and the recording function was impacted and stopped recording. When found, the device was worked upon immediately and corrected. Unit will be hooked into the building automation system in the event it fails, the crematory operator will be contacted.				

1. Group or Source Wide ID FG-BT0260-CO	2. Table/Condition No. 1.	3. Date(s) of Occurrence 11/18/2017	4. Previously reported ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 11/27/17 12/4/2017	5. Duration of Deviation 1 hr 7 min
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Shut down unit.		7. Description of Deviation Failed NOx water pump.		
8. Reason for Deviation and Description of Corrective Action Taken Failed NOx water pump. Operations attempted to troubleshoot the issue but was unable to restart flow. Unit was shut down. Solar Turbine determined it was a failed NOx pump which was replaced 11/29/2017				



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Report Type: Annual Semi Annual Other (Describe) _____

1. Group or Source Wide ID EU-T0260-10	2. Table/Condition No. III.1	3. Date(s) of Occurrence 11/22/2017 thru 11/27/2017	4. Previously reported ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 11/27/17	5. Duration of Deviation 4.5 days
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Monitored temp., ensured there was water flow		7. Description of Deviation NOx water flow meter failed and was not continuously being monitored and recorded while unit was operating.		
8. Reason for Deviation and Description of Corrective Action Taken Replacement meter wasn't able to communicate with process control system. The unit was started up verifying flow. Pump was put in manual and temp. monitored. Returned from Holiday break, it was determined to shut unit down until meter could be replaced / repaired.				

1. Group or Source Wide ID FG-BT0260-CO	2. Table/Condition No. III.2	3. Date(s) of Occurrence 11/22/2017 thru 11/27/2017	4. Previously reported ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 11/27/17	5. Duration of Deviation 4.5 days
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Monitored temp., ensured there was water flow		7. Description of Deviation NOx water flow meter failed and was not continuously being monitored and recorded while unit was operating.		
8. Reason for Deviation and Description of Corrective Action Taken Replacement meter wasn't able to communicate with process control system. The unit was started up verifying flow. Pump was put in manual and temp. monitored. Returned from Holiday break, it was determined to shut unit down until meter could be replaced / repaired.				

1. Group or Source Wide ID	2. Table/Condition No.	3. Date(s) of Occurrence	4. Previously reported ? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date	5. Duration of Deviation
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit)		7. Description of Deviation		
8. Reason for Deviation and Description of Corrective Action Taken				



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1. Group or Source Wide ID EU-T0260-10	2. Table/Condition No. 1.	3. Date(s) of Occurrence Intermittent thru December 2017	4. Previously reported ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 1/2/2018	5. Duration of Deviation Intermittent; 10-15 sec bumps
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) N/A		7. Description of Deviation Intermittent loss of NOx water due to pump issues.		
8. Reason for Deviation and Description of Corrective Action Taken NOx pumps were cavitating and pulling air into the system and would cause the loss of NOx water flow. A permanent by-pass around the pumps was installed on 12/21/17 to solve issue.				

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6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) N/A		7. Description of Deviation Intermittent loss of NOx water due to pump issues.		
8. Reason for Deviation and Description of Corrective Action Taken NOx pumps were cavitating and pulling air into the system and would cause the loss of NOx water flow. A permanent by-pass around the pumps was installed on 12/21/17 to solve issue.				

1. Group or Source Wide ID EU-T0260-09	2. Table/Condition No. 1.	3. Date(s) of Occurrence Intermittent thru December 2017	4. Previously reported ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Date 1/2/2018	5. Duration of Deviation Intermittent; 10-15 sec bumps
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) N/A		7. Description of Deviation Intermittent loss of NOx water due to pump issues.		
8. Reason for Deviation and Description of Corrective Action Taken NOx pumps were cavitating and pulling air into the system and would cause the loss of NOx water flow. A permanent by-pass around the pumps was installed on 12/21/17 to solve issue.				