

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**FCE Summary Report**

<b>Facility :</b> EAGLE VALLEY RECYCLE & DISPOSAL FACILITY	<b>SRN :</b> N3845
<b>Location :</b> 600 W. SILVER BELL RD.	<b>District :</b> Southeast Michigan
	<b>County :</b> OAKLAND
<b>City :</b> ORION TWP <b>State:</b> MI <b>Zip Code :</b> 48359	<b>Compliance Status :</b> Compliance
<b>Source Class :</b> MAJOR	<b>Staff :</b> Rebecca Loftus
<b>FCE Begin Date :</b> 07/04/2014	<b>FCE Completion Date :</b> 3/9/2016
<b>Comments :</b>	

**List of Partial Compliance Evaluations :**

Activity Date	Activity Type	Compliance Status	Comments
03/09/2016	MACT (Part 63)	Compliance	Initial Semi-Annual Compliance Report for FGEMERGENCYGENEX, provided during my on-site inspection. FGEMERGENCYGENEX was added to the ROP on November 25, 2015 and the initial report was due January 31, 2016 (note future reports are due March 15th, along with other annual/semi-annual reports). Although the report is late, Eagle Valley certified that there were no deviations to the emission limits or operational limits. Eagle Valley also stated future reports will be submitted on time with all other annual/semi-annual reports. I reminded Eagle Valley to include the late submittal in their September Semi-Annual Report. -Reviewed by R. Loftus
03/09/2016	Scheduled Inspection	Compliance	

Activity Date	Activity Type	Compliance Status	Comments
12/08/2015	Stack Test	Compliance	<p>Test report for the verification of CO, NOx and VOC emissions from two (2) landfill gas fired RICE.</p> <p>According to the report, the following emissions were observed: Engine 1 - NOx was 0.54 g/bhp-hr, CO was 2.46 g/bhp-hr, VOC was 0.11 g/bhp-hr. Engine 2 - NOx was 0.68 g/bhp-hr, CO was 2.59 g/bhp-hr, VOC was 0.08 g/bhp-hr. All results were below the limits established in their permit. -Report reviewed by R. Loftus</p>
09/30/2015	ROP Semi 1 Cert	Compliance	<p>Semi Annual, January 1, 2015 – June 30, 2015: For this reporting period, the facility reported two deviations. The first deviation was shallow collectors installed beneath the overlay line. In response, Eagle Valley requested an alternate operating scenario. The second deviation was to report no flare data recorded for more than 15 minutes at a time. The skid was de-energized for maintenance on these occasions; responses to the downtimes were consistent with the SSM Plan. Report reviewed by R. Loftus</p>

09/30/2015	NSPS (Part 60)	Compliance	<p>NSPS, January 1, 2015 – June 30, 2015: The facility properly documented (20) instances in which wells had temperature, oxygen, and pressure exceedances. Of these, three wells had exceedances that could not be corrected within 15 days. WM requested higher operating values/alternative timelines and continued tuning to bring these wells back into compliance. Table 1 of the NSPS report provides a detailed account of the duration of each wellhead exceedance.</p> <p>For the two enclosed combustors, there were no reported 3-hour periods where with flare operated at an average temperature more than 28oC below the temp in the most recent stack test.</p> <p>Eagle Valley does not have a bypass of the control system; therefore LFG was not discharged directly to ambient air.</p> <p>Eagle Valley reported nine instances during the reporting period in which all the control devices (Treatment System, Flares, and two LF Gas to Energy Engines) were simultaneously not operating for longer than 1 hour in duration. These were all due to weather, power outages, and/or construction. Attachment 3 provides a summary of the events and the corrective actions taken.</p> <p>Eagle Valley noted five times when the flare temperature was not recorded every 15 minutes. The missed readings ranged from 1.0 hours to 1.3hours and were due to flares being offline – See attachment 4.</p> <p>There were no instances in which the gas collection system was down for more than 5 days.</p> <p>For the 1st quarterly scan, three locations initially exceed 500ppm, 10 day readings: 5ppm, 35ppm, 25ppm, 30 day readings 5ppm, 210ppm, 15ppm; based on the results, Eagle Valley reported they remediated the exceedances.</p>
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09/30/2015	NSPS (Part 60)	Compliance	<p>For the 2nd quarterly scan, one location initially exceeded 500ppm, 10 day readings: 200ppm, 30 day readings 100ppm; based on the results, Eagle Valley reported they remediated the exceedance.</p> <p>Eagle Valley installed one new well during this reporting period, EGLTW89R.</p> <p>Report reviewed by R. Loftus</p>
09/30/2015	MACT (Part 63)	Compliance	<p>Startup, Shutdown, and Malfunction Report, January 1, 2015 – June 30, 2015: For this reporting period there were 62 start-up events, 17 shutdown events, and 35 malfunction events. Attachment #2 of the SSM report lists the date, duration, and description of all the malfunction events which occurred during this reporting period. Eagle Valley reported, the actions taken in response to these events were consistent with the procedures listed in the SSM Plan and they did not cause an exceedance of any applicable emission limits. Effective February 23, 2015, the following revisions to the SSM were made: Wells/piping have been removed from the plan, only flares/gas treatment owned by the facility are subject to the SSM, normal start-ups/shut downs are not an SSM if no applicable limit has been exceeded, Loss of power is no long a malfunction and will now be classified as a shutdown, all contact information was updated, and the SSM form was updated. A QD staff will follow up with changes to the SSM plan at the next facility inspection.</p> <p>Report reviewed by R. Loftus.</p>
08/14/2015	Stack Test	Compliance	<p>Compliance Test Protocol for CO, NOX, and VOC testing for two LFG-fired RICE, Subject to 40 CFR Part 60 Subpart JJJJ. The results for this test will be entered as a separated report received.</p> <p>Protocol reviewed by R. Loftus</p>
07/27/2015	ROP Tech Review Notes		<p>2015 ROP Renewal Technical Review Completed by R. Loftus</p>

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06/01/2015	MAERS	Compliance	MAERS Report: Audit Complete; See review notes in MAERS database. Reviewed by R. Loftus
03/27/2015	ROP SEMI 2 CERT	Compliance	Semi-Annual: July 1, 2014 - December 31, 2014: For this reporting period, the facility reported two deviations. The first deviation was for well EGLRW122, an out of waste well, which had an increase in oxygen. In response, Eagle Valley requested an alternate operating value. The second deviation was to report no flare data recorded for more than 15 minutes at a time. The skid was de-energized for maintenance on these occasions; the times of missing data are associated with the flares being shut down for repairs Responses to the downtimes were consistent with their SSM Plan. Report reviewed by R. Loftus

03/27/2015	NSPS (Part 60)	Compliance	<p>Semi-annual NSPS Report: July 1, 2014 - December 31, 2014; The facility properly documented (14) instances in which wells had temperature, oxygen, and pressure exceedances. Of these, one well had an exceedance that could not be corrected within 15 days. WM requested higher operating values/alternative timelines and continued tuning to bring these wells back into compliance. Table 1 of the NSPS report provides a detailed account of the duration of each wellhead exceedance.</p> <p>For the two enclosed combustors, there were no reported 3-hour periods where with flare operated at an average temperature more than 280C below the temp in the most recent stack test. Eagle Valley does not have a bypass of the control system; therefore LFG was not discharged directly to ambient air.</p> <p>Eagle Valley reported two instances during the reporting period in which all the control devices (Treatment System, Flares, and two LF Gas to Energy Engines) were simultaneously not operating for longer than 1 hour in duration. The first spanned 1.1 hours due to a power outage and the second 1.9 hours due to third party downtime and a high temperature shut down of the flare.</p> <p>Eagle Valley noted four times when the flare temperature was not recorded every 15 minutes. The missed readings ranged from 0.5 hours to 3.8 hours and were due to the loss of power from storms or de-energizing the equipment for maintenance – See Table 2.</p> <p>There were no instances in which the gas collection system was down for more than 5 days.</p> <p>The third quarterly scan showed no locations at the landfill that initially exceeded 500ppm methane. For the fourth quarterly scan, one location initially exceed</p>
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03/27/2015	NSPS (Part 60)	Compliance	<p>500ppm, 10 day reading was 270ppm, 30 day reading was 17ppm; based on the results Eagle Valley remediated the exceedance.</p> <p>Eagle Valley do not add any additional wells during this reporting period; one well from the previous construction project was brought online on 7/11/14.</p> <p>Report reviewed by R. Loftus</p>
03/27/2015	ROP Annual Cert	Compliance	<p>For 2014, the facility reported total of four deviations (see the semi-annual reports for details). In response to the deviations, WM's responses to each deviation occurred in a timely fashion and/or were consistent with their SSM Plan. Report reviewed by R. Loftus</p>
03/27/2015	MACT (Part 63)	Compliance	<p>Startup, Shutdown, and Malfunction Report: July 1, 2014 – December 31, 2014: For this reporting period there were 80 start-up events, 46 shutdown events, and 35 malfunction events. Attachment #2 of the SSM report lists the date, duration, and description of all the malfunction events which occurred during this reporting period. Eagle Valley reported, the actions taken in response to these events were consistent with the procedures listed in the SSM Plan and no revisions to the SSM Plan were made. Report reviewed by R. Loftus.</p>
03/23/2015	ROP Other	Compliance	<p>MAERS ROP Certification - received on time. Reviewed by R. Loftus</p>
02/27/2015	MACT (Part 63)	Compliance	<p>2014 Annual Compliance Report Pursuant to 40 CFR Part 63, Subpart ZZZZ: LFG is the only fuel combusted by the two engines at Eagle Valley. The fuel flow was 561,611 MCF, Ave. methane concentration was 51.9%, and the higher heating value of the LFG was 1,012 Btu/scf. Report reviewed by R. Loftus.</p>

Activity Date	Activity Type	Compliance Status	Comments
12/29/2014	ROP Other	Compliance	<p>Test report for the verification of CO, NOx and VOC emissions from two (2) landfill gas fired CAT G3520C reciprocating internal combustion engines (Permit to Install 116-10). Document prepared by Derenzo and Associates, Inc. dated November 24, 2014.</p> <p>The reported emission factors for Engines 1 and 2 appear to be below the limits established in the PTI and NSPS JJJJ:            Engine 1: 0.67 g/bhp-hr NOx, 2.29 g/bhp-hr CO, 0.11 g/bhp-hr VOC.            Engine 2: 0.73 g/bhp-hr NOx, 2.28 g/bhp-hr CO, 0.12 g/bhp-hr VOC.            -Report reviewed by R. Loftus</p>
09/26/2014	MACT (Part 63)	Compliance	<p>Startup, Shutdown, and Malfunction Report, January 1, 2014 – June 30, 2014: For this reporting period there were 94 start-up events, 39 shutdown events, and 52 malfunction events. Table 1 of the SSM report lists the date, duration, and description of all the malfunction events which occurred during this reporting period. The actions taken in response to these events were consistent with the procedures listed in the SSM Plan and no revisions to the SSM Plan were made. Report reviewed by R. Loftus.</p>



Activity Date	Activity Type	Compliance Status	Comments
09/26/2014	ROP Semi 1 Cert	Compliance	Semi-Annual, January 1, 2014 – June 30, 2014: For this reporting period, the facility reported two deviations. The first deviation was for seven wells which had oxygen, pressure, and/or temperature variances. In response, Eagle Valley requested to decommission some wells, requested alternate timelines/operating values, and/or achieved compliance through well tuning or re-drilling. The second deviation was to report no flare data recorded for more than 15 minutes at a time. The skid was de-energized for maintenance on these occasions; the times of missing data are associated with the flares being shut down for repairs Responses to the downtimes are consistent with their SSM Plan. Report reviewed by R. Loftus
09/26/2014	NSPS (Part 60)	Compliance	Semi-annual NSPS Report: The facility properly documented instances in which wells had temperature, oxygen, and pressure exceedances. In the (7) instances in which the exceedance could not be corrected within 15 days, the facility requested higher temperature operating variances for several wells, alternative timelines for other wells, and that certain wells be decommissioned. Tables 1 and 2 of the NSPS report provide a detailed account of the duration of each wellhead exceedance. There were no instances during the reporting period in which all the control devices (Treatment System, Flares, and two LF Gas to Energy Engines) were simultaneously not operating for longer than 1 hour in duration. There were no instances in which the gas collection system was down for more than 5 days. The 1st and 2nd quarterly scans showed no locations at the landfill that initially exceeded 500ppm methane. Eagle Valley added 12 new wells, re-drilled one well, and added associated vacuum laterals during this reporting period. Report reviewed by R. Loftus.

Name: Rebecca J. [Signature] Date: 4/4/16 Supervisor: CTE