

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**FCE Summary Report**

<b>Facility :</b> SUMPTER ENERGY ASSOCIATES	<b>SRN :</b> N8004
<b>Location :</b> 36450 29 MILE RD	<b>District :</b> Southeast Michigan
	<b>County :</b> MACOMB
<b>City :</b> LENOX TWP <b>State:</b> MI <b>Zip Code :</b> 48062	<b>Compliance Status :</b> Compliance
<b>Source Class :</b> MAJOR	<b>Staff :</b> Rebecca Loftus
<b>FCE Begin Date :</b> 3/26/13	<b>FCE Completion Date :</b> 8/6/2014
<b>Comments :</b> See also N5984, Pine Tree Acres Landfill. These two SRNs make up one stationary source.	

**List of Partial Compliance Evaluations :**

Activity Date	Activity Type	Compliance Status	Comments
08/06/2014	Scheduled Inspection	Compliance	Annual Compliance Inspection
07/14/2014	Stack Test	Compliance	Stack Test Report for the Verification of Carbon Monoxide, Nitrogen Oxides and Non-Methane Hydrocarbon Emission Rates for Engines 1-7. According to the report, the emission rates during the test were in compliance with permit limits (see report for details). The report was reviewed by R. Loftus and Mark Dziadosz (See Mark's Review in the file)
05/30/2014	MAERS	Compliance	Audit Complete; no changes made. See review notes in MAERS database. - R. Loftus
04/28/2014	ROP Other	Compliance	Test report for total chlorinated compound content of Landfill gas used to fuel reciprocating internal combustion engines at the Sumpter Energy Associates, Pine Tree Acres facility. According to the report the HCl emission factors were in compliance with permit limits (0.7 lbs/hr). The results showed HCl emissions were 2.28 lb/MMscf at 1986scfm and 0.27 lbs/hr. Report reviewed by R. Loftus
04/22/2014	Stack Test Observation	Pending	CO, NOx and NMOC tests for EUENGINE1 through EUENGINE7. See results when report is submitted. - Sebastian Kallumkal

Activity Date	Activity Type	Compliance Status	Comments
03/31/2014	ROP SEMI 2 CERT	Compliance	Semi-Annual July 2013-December 2013: Sumpter reported two deviation. The deviations were for one day of high aftercooler temperatures on Engine #1 and #5. To correct the temperature, gas pressure from the landfill was re-established and the air to fuel ratio screw was replaced. Report reviewed by R. Loftus
03/31/2014	ROP Annual Cert	Compliance	Annual Certification: During the 1st half of the year, January-June 2013, Sumpter reported no deviations. For the 2nd half of the year, July-December 2013, Sumpter reported two deviation. The deviations were for one day of high aftercooler temperatures on Engine #1 and #5. To correct the temperature, gas pressure from the landfill was re-established and the air to fuel ratio screw was replaced. Report reviewed by R. Loftus
03/17/2014	Stack Test	Compliance	Stack Test Protocol for the Verification of Carbon Monoxide, Nitrogen Oxides and Non-Methane Hydrocarbon Emission Rates. Emission verification Test Plan for LFG-fired IC engines (EUENGINE1-7) in MI-ROP-N8004-2013. The testing will be conducted in accordance with the enclosed Test Plan and the facility will be operated in compliance with the permit conditions or at the maximum routine operating conditions for the facility. Reviewed by R. Loftus and M. Dziadosz
03/17/2014	ROP Other	Compliance	MAERS Certification received on time. -R. Loftus
01/31/2014	MACT (Part 63)	Compliance	40 CFR Part 63, Subpart ZZZZ Annual Compliance Report: Phase I consists of seven CAT 3516 RICE and Phase II consists of two CAT 3520 RICE. The Yearly landfill gas (LFG) fuel usage for Phase I was 1,099,971,411 scf and for Phase II was 507,099,373 scf The total heat input for LFG was reported at 755,191 MMBtu. Sumpter certified there were no deviations from the operating limits and no problems with the fuel meters. Report reviewed by R. Loftus.

Activity Date	Activity Type	Compliance Status	Comments
01/30/2014	Stack Test	Compliance	Test results report for verification of carbon monoxide, nitrogen oxides, and volatile organic compound concentrations and emission rates from two CAT G3520C IC Engines identified as EUENGINE8 and EUENGINE9. According to the test report Engine #8 had the following emission rates: NOx was 0.46 g/bhp-hr and 2.19 lbs/hr, CO was 2.51 g/bhp-hr and 11.9 lbs/hr, VOC was 0.14 g/bhp-hr. Engine #9 had the following emission rates: NOx was 0.51 g/bhp-hr and 2.41 lbs/hr, CO was 3.20 g/bhp-hr and 15.1 lbs/hr, VOC was 0.16 g/bhp-hr. Both engines appear to be in compliance with the permit limits: NOx 0.60 g/bhp-hr and 3.0 lbs/hr, CO 3.3 g/bhp-hr and 16.3 lbs/hr, VOC was 1.0 g/bhp-hr. Report Reviewed by R. Loftus
11/15/2013	Stack Test	Compliance	Test plan for the measurement of CO, NOx and VOC emissions from two landfill gas fired CAT G3520C reciprocating internal combustion engines (FGICENGINE2, Engines #8 and #9, PTI No. 103-09, MI-ROP-N8004-2008). Reviewed by R. Loftus and M. Dziadosz
10/28/2013	ROP Semi 1 Cert	Compliance	Received on time; Sumpter reported no deviations for the January 1, 2013 through June 30, 2013 reporting period. -R. Loftus
10/23/2013	Other	Compliance	Unannounced Inspection of Gas Plant
05/30/2013	MAERS	Compliance	Audit Complete; data provided in January 2013 was used to update the CO, NOx, and VOC emissions for Engines #8 and #9. This change increased the reported emissions for CO by 42,797 lbs, NOx by 4,102 lbs, and VOC by 4,912 lbs. See review notes in MAERS database.
05/20/2013	ROP Other	Compliance	Updated Malfunction Abatement/Preventative Maintenance Plan.

Name: R. Loftus

Date: 9/10/14

Supervisor: CTE