

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

FCE Summary Report

Facility : Marshall City, Electric Powerplant		SRN : C6230
Location : 906 South Marshall Ave.		District : Kalamazoo
		County : CALHOUN
City : MARSHALL	State: MI	Zip Code : 49068
Compliance Status :		Compliance
Source Class : SM OPT OUT	Staff : Rex Lane	
FCE Begin Date : 11/9/2014	FCE Completion Date :	11/9/2015
Comments : FCE Report		

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
11/03/2015	Stack Test Observation	Compliance	Stack Test Observation - EU-ENG-5
11/03/2015	Self Initiated Inspection	Compliance	Self Initiated Inspection
10/12/2015	MACT (Part 63)		Notification of Performance Testing: EU-ENG-5 and EU-ENG-6 Facility is installing catalytic oxidizer controls on EU-ENG-5 to meet the CO emission standard under 40 CFR Part 63, Subpart ZZZZ. Report indicates that the emission test is scheduled for 11/3/15. Staff will contact Mr. Ed Rice, City of Marshall since a test plan has not yet been received for review. -RIL

Activity Date	Activity Type	Compliance Status	Comments
07/16/2015	Stack Test	Compliance	<p>EU-ENG-3 (Engine # 3): Carbon Monoxide Destruction Efficiency Testing - PTI No. 128-14A</p> <p>Test was conducted on 5/27/15 to demonstrate compliance with 40 CFR Part 63, Subpart ZZZZ. Engine # 3 is a Fairbanks Morse dual fuel engine rated at 2070 KW. A total of four one-hour test runs were completed because Test Run # 3 did not pass the post-run calibrations on the inlet CO analyzer for bias or drift. During the test observations, the main concern district staff had was related to the instantaneous readout for catalyst differential pressure was very low to negative at times during the test runs.</p> <p>Total engine run time per the test report was 5.2 hours and 10,120 KW were generated which is 1,946 KW/hour (94% of nominal capacity of Engine # 3). The engine consumed 93,000 ft3 of natural gas and 64 gallons of diesel fuel during the test run and averaged 9,190 Btu/KW. The test report included one minute recordings of the catalyst differential pressure and catalyst temperature for each of the four test runs. The differential pressure range averaged between 1.44 and 1.80 inches of water and catalyst inlet temperature averaged between 570.2 and 587.9 degrees F during testing. During testing, the outlet concentration for CO ranged between 13.45 and 14.31 ppm corrected to 15% O2 during testing and the CO destruction efficiency ranged between 93.03% and 93.61%. Under the RICE MACT, Engine # 3 is required to meet either a CO outlet concentration limit of less than 23 ppm corrected to 15% O2 or a 70% or greater reduction of CO emissions. -RIL</p>
05/27/2015	Stack Test Observation	Compliance	RICE MACT Emission Testing - Engine # 3

Name:

RIL

Date:

11/9/15

Supervisor:

MA 11/9/2015