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DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

FCE Summary Report

Facility : LBWL, Eckert, Moores Park & REO Cogeneration	SRN : B2647
Location : 601 Island Ave PO Box 13007	District : Lansing
	County : INGHAM
City : LANSING State: MI Zip Code : 48901	Compliance Status : Compliance
Source Class : MAJOR	Staff : Brad Myott
FCE Begin Date : 6/1/2014	FCE Completion Date : 7/21/2015
Comments :	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
07/09/2015	Scheduled Inspection	Compliance	Perform inspection to determine compliance with MI-ROP-B2647-2012b
05/29/2015	ROP Other	Compliance	QTRLY REPORT DAILY SO2 COMPLIANCE. High SO2 emission 2/22/15 on #5 of 0.564 #SO2/mmbtu. limit is 1.67.
05/29/2015	Excess Emissions (CEM)	Compliance	Mark Matus responsible official. QTRLY REPORT - Excess emissions & monitoring systems performance & summary report for OPACITY. Units 1, 3, 4, 5 and 6 operated. Monitors spent less than 0.21% of the operational time in deviation. The longest single opacity exceedance event was 24 mins. boiler startup/shutdown on 2/21/2015 on #1. NOx data indicates REO town did not experience any exceedances.
05/29/2015	ROP Qrtly Cert	Compliance	MI-ROP-B2647-2012. Mark Matus, Responsible Official. Includes ROP Deviation Report. 7 opacity deviations, and 7 monitor downtime events.

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05/18/2015	MAERS	Compliance	ROP cert received 3/18/15. MAERS reviewed on 5/18/2015. Emissions appeared to be in line with previous year's reports. 2014 was the 1st full year that REO plant was running and Moores Park was shutdown. Slight increase in CO but most other pollutants decreased.
05/18/2015	Stack Test	Compliance	RATA for the EUBOILER3 source. Results for flow, CO2 and SO2 were within spec for an annual RATA frequency. NOx measurements demonstrated the CEMS was operating within the allowable semiannual relative accuracy perf. spec.
03/09/2015	Stack Test	Compliance	Winter load testing results of 2nd initial PM, PM2.5, PM10 performance verification for REO Town Cogen. Facility. The following emission units were tested EUTURBINE1, EUTURBINE2, FGTURB/HRSG1, and FGTURB/HRSG2. FGTURB/HRSG1 & 2 indicates use of duct burner. Both EUTURBINE1 & 2 were tested for PM, Pm10 and PM2.5 at max load with and without duct burner. Tom Gasloli witnessed part of this stack test during the week of 1/20/15. Test protocol was approved by TPU. Results indicate compliance (well below permit limits) while the units operated at required conditions (max load). Megawatts, steam flow, nat gas flow and heat input were monitored and included in the report. Results will be reviewed by TPU.
02/06/2015	ROP Annual Cert	Compliance	Certification for MI-ROP-B2647-2012. Mark Matus responsible official. See quarterly EE(CEM) reports for any exceedences. Deviations were mostly minor monitor downtime and opacity exceedences at ECKert station due to startup/shutdown and soot blowing.

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02/06/2015	ROP SEMI 2 CERT	Compliance	Certification for MI-ROP-B2647-2012. Mark Matus responsible official. See quarterly EE(CEM) reports for any exceedences. Deviations were mostly minor opacity exceedences at ECKert station.
02/06/2015	CAM Excursions/Exceedances	Compliance	MI-ROP-B2647-2012
02/06/2015	CAM monitor downtime	Compliance	MI-ROP-B2647-2012. 3 Incidents reported due to startup/shutdown and 1 due to instrument malf.
02/06/2015	ROP Other	Compliance	QTRLY REPORT DAILY SO2 COMPLIANCE. High SO2 emission 10/3/14 on #3 of 0.914 #SO2/mmbtu. limit is 1.67.
02/06/2015	Excess Emissions (CEM)	Compliance	Mark Matus responsible official. QTRLY REPORT - Excess emissions & monitoring systems performance & summary report for OPACITY. Units 1, 3, 4, 5 and 6 operated. Monitors spent less than 0.110% of the operational time in deviation. The longest single opacity exceedance event was 24 mins. boiler startup/shutdown on 11/11/2014 on #5. NOx data indicates REO town did not experience any exceedences.
01/20/2015	CEM RATA	Compliance	Testing performed Sept. 30 through Oct. 2, 2014. NOx and O2 RATA of the CEMs associated with EUAUXBOILER, FGTURB/HRSG1 and FGTURB/HRSG2. The O2 and NOx measurements demonstrate the CEMS are operating within allowable relative accuracy limits.
10/23/2014	ROP Other	Compliance	Third QTRLY REPORT DAILY SO2 COMPLIANCE. Highest SO2 daily emission recorded 7/29 on #3 of 0.847 #SO2/mmbtu. limit is 1.67.
10/23/2014	Excess Emissions (CEM)	Compliance	MI-ROP-B2647-2012. Certified by Mark Matus, Responsible Official. QTRLY REPORT - Excess emissions & monitoring systems performance & summary report for OPACITY. Average for all six units was less than 1.0 % of the operational time in deviation of opacity. The longest single event was 18 mins due to soot blowing issues on 7/2/2014 on unit #3.

Activity Date	Activity Type	Compliance Status	Comments
09/25/2014	ROP Semi 1 Cert	Compliance	MI-ROP-B2647-2012. Responsible official, Mark Matus. Deviations previously reported in quarterly reports.
09/25/2014	CAM monitor downtime	Compliance	MI-ROP-B2647-2012. Minor downtime events reported mostly due to startup/shutdown issues.
09/25/2014	CAM Excursions/Exceedances	Compliance	MI-ROP-B2647-2012. 3 opacity exceedance events, all previously reported in quarterly reports. 1 incident, lasting for 5 hours resulted in a 912 report and VN that has since been resolved.
08/09/2014	Stack Test	Compliance	Summer load testing results of initial performance verification for REO Town Cogen. Facility, for FGTURB/HRSG1, and FGTURB/HRSG2. Units were tested for CO at varying loads and PM, Pm10 and PM2.5 at max load. I witnessed part of this stack test on 6/11/14. See my observation reports in compliance activity on this date. Test protocol was approved on 5/5/14. Results received on 7/30/14 indicate compliance. Megawatts, steam flow, nat gas flow and heat input were monitored and recorded. Results reviewed by TPU and are acceptable as of 9/11/14.

Activity Date	Activity Type	Compliance Status	Comments
08/08/2014	Stack Test	Non Compliance	<p>Winter load testing results of initial performance verification for REO Town Cogen. Facility, EUTURBINE1, EUTURBINE2, FGTURB/HRSG1, and FGTURB/HRSG2. All units were tested for CO at varying loads and PM, Pm10 and PM2.5 at max load. I witnessed part of this stack test on 2/19 & 2/20/14. See my observation reports in compliance activity on these dates. Test protocol was approved on 1/16/14. Results reviewed by TPU and summarized in a memo dated 6/18/14 by T. Gasloli. Results are acceptable to the AQD and indicate compliance for CO testing but noncompliance for PM, PM10, PM2.5 for both Turbine 1 with and without duct burner and noncompliance for PM, Pm10, PM2.5 for Turb 2 and noncompliance for PM10 and PM2.5 for Turb 2 with ductburner. VN sent to company on 7/2/14 for violation of emission limits in ROP.</p> <p>Winter test PROTOCOL for REO Cogen was reviewed by Tom Gasloli and a letter sent to LBWL dated 1/16/14 summarizing the testing to be performed in Feb. 2014. EUAUXBOILER, EUTURB1&2, FGTURB/HRSG1&2 to be tested for CO, PM, PM10 & PM2.5 at various loads. Megawatts, steam flow, nat gas flow and heat input to be monitored.</p>
08/08/2014	CEM RATA	Compliance	<p>EUBOILER5 annual RATA required by Part 75. Test protocol reviewed by Nathan Hude on 6/6/14. Testing to be done on 7/1/14 and 7/2/14. RATA for gas flow, CO2, SO2, and NOx. Results received on 8/6/14 and indicate CEMS/CERMS are operating within allowable relative accuracy limits.</p>

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08/08/2014	Stack Test	Compliance	EUBOILER3 of FGECKERT PM testing on 5/13/14. Test protocol approved by D. Patterson on 5/1/14. Unit Tested at high load (approx. 40 MW). Facility data indicates load requirement was met. Results indicate compliance. Avg. Result was 0.029 lb/1,000 lb exhaust gas at 50% excess air and limit is 0.20.
08/07/2014	ROP Qrtly Cert	Compliance	MI-ROP-B2647-2012. Mark Matus, Responsible Official. 10 opacity deviations, and 5 monitor downtime events.
08/07/2014	Excess Emissions (CEM)	Compliance	MI-ROP-B2647-2012. Mark Matus, Responsible Official. QTRLY REPORT - Excess emissions & monitoring systems performance & summary report for OPACITY. Average for all six units was less than 1.0 % of the operational time in deviation of opacity. The longest single event was 48 mins due to start up/shut down issues on 4/21/2014 on #5.
08/07/2014	ROP Other	Compliance	QTRLY REPORT DAILY SO2 COMPLIANCE. High SO2 emission 6/28 on #6 of 0.767 #SO2/mmbtu. limit is 1.67.
06/19/2014	Other Non ROP	Compliance	UNIT 2 at Eckert Station has been decommissioned. BWL submitted a form to EPA "Retired Unit Exemption" to notify them that Unit 2 is now exempt from Acid Rain, CAIR and Transport Rule requirements. The unit was shutdown on 3/31/2014.
06/19/2014	CEM RATA		Request for extension for RATA for CO and NOx for REO EUAUXBOILER at higher loads. At a heat input greater than 122.5 mmBTU/hr, the unit generates 90,000 lbs/hr steam. During the 3rd quarter, only 30,000 lbs/hr steam needed due to warm temps. and limited demand for steam. This would require venting the excess steam which creates a loud sound that leads to complaints. Company is requesting to perform lower load testing now and postpone higher load testing until 1st quarter 2015.
06/11/2014	Stack Test Observation	Compliance	Witness REO Summer Stack Test of FGTURB/HRSG1 at max load.

Name:  Date: 8/4/15 Supervisor: 