

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

FCE Summary Report

Facility : LBWL, Eckert Station & REO Cogeneration	SRN : B2647
Location : 601 Island Ave PO Box 13007	District : Lansing
	County : INGHAM
City : LANSING State: MI Zip Code : 48901	Compliance Status : Non Compliance
Source Class : MAJOR	Staff : Julie Brunner
FCE Begin Date : 1/17/2018	FCE Completion Date : 1/17/2019
Comments : Violations on EUNGINE and MATS for mercury monitor downtime	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
01/14/2019	ROP Qrtly Cert	Compliance	<p>4th quarter 2018 ROP No. MI-ROP-B2647-2018 Report - Certification by Lori Myott, Manager, Environmental Services Department, Responsible Official - Excess emissions, monitoring systems performance and opacity performance summary. For Eckert, Units 4, 5, and 6 operated. Unit 4 had COMS excess emissions 0.01% of the operating time for a duration of 6 minutes total. Unit 5 had COMS excess emissions 0.18% of the operating time for a duration of 138 minutes total. Unit 6 had COMS excess emissions 0.99% of the operating time for a duration of 54 minutes total. COMS monitor downtime reported for Unit 4 was 0.10% (48 min), Unit 5 was 0.21% (162 min) and Unit 6 had no monitor downtime at Eckert. No excess emissions were reported for REO Town. For the NOx CEMS at the REO Town Plant - EUAUXBOILER, EUTURBINE1, and EUTURBINE2 had monitor downtime reported. The highest downtime reported was 1.58% (9.02 hrs) of operating time for the EUAUXBOILER NOx pph & ppmvd.</p> <p>Linearity Test Reports - All REO Town Plant units passed the linearity testing.</p> <p>DAILY SO2 COMPLIANCE - Highest SO2 emission rate of 0.671 lb/MMBtu from EUBOILER4 reported. SO2 limit is 1.67 lb/MMBtu.</p>
01/10/2019	CEM RATA	Compliance	<p>REO Town Aux Boiler. RATA test report for NOx and O2. The NOx and O2 measurements demonstrate the CEMS is operating within allowable relative accuracy limits.</p>
01/10/2019	Stack Test	Compliance	<p>4th quarter MATS Unit 5 (EUBOILER5). PM emissions were 0.0198 lb/MMBtu (66% of standard) and HCl emissions were 0.0006 lb/MMBtu (30% of standard). Met LEE status at less than 50% of the standard under 40 CFR 63, Subpart UUUUU for HCl and not for PM.</p>

Activity Date	Activity Type	Compliance Status	Comments
12/20/2018	CEM RATA	Compliance	RATA of CEMS servicing Unit 5 (EUBOILER5). 10/9-10/2018 - NOx, SO2, and CO2 RATA of the CEMS. The SO2, CO2 and NOx measurements demonstrate the CEMS is operating within allowable relative accuracy limits.
12/14/2018	Scheduled Inspection	Non Compliance	Compliance inspection of LBWL – Eckert Power Station and REO Town Plant (ROP No. MI-ROP-B2647-2018)
12/12/2018	Stack Test Observation		Retesting of EUNGENGINE for PM10/PM2.5
12/03/2018	CEM RATA	Compliance	REO Town HRSG1. RATA test report for NOx and O2. The NOx and O2 measurements demonstrate the CEMS is operating within allowable relative accuracy limits.
12/03/2018	CEM RATA	Compliance	REO Town HRSG2. RATA test report for NOx and O2. The NOx and O2 measurements demonstrate the CEMS is operating within allowable relative accuracy limits.
11/26/2018	CEM RATA	Compliance	RATA on CEMS servicing Unit 5 (EUBOILER5). 10/9-10/2018 - Mercury (Hg) RATA of the CEMS associated with EUBOILER5. The Hg measurements demonstrate the CEMS is operating within allowable relative accuracy limits. 10/8-9/2018 - Flow RATA of the CEMS. The flow measurements demonstrate the CEMS is operating within allowable relative accuracy limits.

Activity Date	Activity Type	Compliance Status	Comments
10/29/2018	ROP Qrtly Cert	Compliance	<p>3rd quarter 2018 ROP No. MI-ROP-B2647-2018 Report - Certification by Lori Myott, Manager, Environmental Services Department, Responsible Official - Excess emissions, monitoring systems performance and opacity performance summary. For Eckert, Units 4, 5, and 6 operated. Unit 4 had COMS excess emissions 0.07% of the operating time for a duration of 78 minutes total. Unit 5 had COMS excess emissions 0.49% of the operating time for a duration of 120 minutes total. Unit 6 had COMS excess emissions 0.02% of the operating time for a duration of 6 minutes total. COMS monitor downtime reported for Unit 4 was 0.07% (72 min) and Unit 5 was 0.05% (12 min) at Eckert. No excess emissions were reported for REO Town. For the NOx CEMS at the REO Town Plant - EUTURBINE1 and EUTURBINE2 had monitor downtime reported. The highest downtime reported was 1.33% (20.80 hrs) of operating time for the EUTURBINE1 NOx pph & ppmvd.</p> <p>Linearity Test Reports - All REO Town Plant units passed the linearity testing.</p> <p>DAILY SO2 COMPLIANCE - Highest SO2 emission rate of 0.630 lb/MMBtu from EUBOILER6 reported. SO2 limit is 1.67 lb/MMBtu.</p>
10/19/2018	Stack Test	Compliance	<p>3rd quarter MATS Unit 6 (EUBOILER6). Testing was 8/29/2018. PM emissions were 0.0084 lb/MMBtu (28% of standard) and HCl emissions were 0.0007 lb/MMBtu (35% of standard). Met LEE status at less than 50% of the standard under 40 CFR 63, Subpart UUUUU for the initial 3-year period on this unit.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/19/2018	Stack Test	Compliance	3rd quarter MATS Unit 4 (EUBOILER4). Testing was 10/12/2018. PM emissions were 0.0055 lb/MMBtu (18% of standard) and HCl emissions were 0.0007 lb/MMBtu (35% of standard). Met LEE status at less than 50% of the standard under 40 CFR 63, Subpart UUUUU.
10/19/2018	Stack Test	Compliance	3rd quarter MATS report for Unit 5 (EUBOILER5). Unit 5 did not operate more than 168 hours in the first and second quarters of 2018, so MATS testing was not performed in those quarters. Testing was 10/18/2018. PM emissions were 0.0136 lb/MMBtu (45% of standard) and HCl emissions were 0.0006 lb/MMBtu (30% of standard). Met LEE status at less than 50% of the standard under 40 CFR 63, Subpart UUUUU.
10/19/2018	Stack Test	Non Compliance	Performance emissions testing for the REO Town emergency engine (EUNGENGINE) per the conditions of ROP No. MI-ROP-B2647-2018; RO. Lori Myott, Env. Mgr.; Measured emissions: CO = 2.3 g/bhp-hr (92% of limit), NOx = 0.5 g/bhp-hr (100% of limit), VOC = 0.61 g/bhp-hr (75% of limit), PM10/2.5 = 0.175 pph (135% of limit). Failed for PM10/2.5.
10/19/2018	CEM RATA	Compliance	RATA on CEMS servicing Unit 4 (EUBOILER4). 10/11/2018 - Mercury (Hg) RATA of the CEMS associated with EUBOILER4. The Hg measurements demonstrate the CEMS is operating within allowable relative accuracy limits. 10/10-11/2018 - Flow, NOx, SO2, and CO2 RATA of the CEMS. The flow, SO2, CO2 and NOx measurements demonstrate the CEMS is operating within allowable relative accuracy limits.

Activity Date	Activity Type	Compliance Status	Comments
10/19/2018	CEM RATA	Compliance	<p>RATA on CEMS servicing Unit 6 (EUBOILER6). 8/28/2018 - Mercury (Hg) RATA of the CEMS associated with EUBOILER4. The Hg measurements demonstrate the CEMS is operating within allowable relative accuracy limits. 8/27-28/2018 - Flow, NOx, SO2, and CO2 RATA of the CEMS. The flow, SO2, CO2 and NOx measurements demonstrate the CEMS is operating within allowable relative accuracy limits.</p>
09/13/2018	Stack Test Observation	Compliance	<p>Stack Test for EUNGENGINE - The testing is required by ROP No. MI-ROP-B2647-2018 and 40 CFR 60, Subpart JJJJ. Test rescheduled.</p>
08/28/2018	MACT (Part 63)	Compliance	<p>1st Semi-annual 2018 MATS compliance report for Eckert boiler units: EUBOILER4, EUBOILER5, and EUBOILER6. Mercury monitor downtime on EUBOILER5 and EUBOILER6 was greater than 5% so a complete emissions report for the period was submitted. Most recent boiler tune-ups: EUBOILER4 on 9/11-12/2015, EUBOILER5 on 9/17/2015, and EUBOILER6 on 9/18-19/2015. Testing not done on EUBOILER5, and EUBOILER6 in the first quarter because less than 168 operating hours during the quarters.</p>

Activity Date	Activity Type	Compliance Status	Comments
08/28/2018	ROP Semi 1 Cert	Compliance	Semi-Annual 1 Certification for ROP No. MI-ROP-B2647-2018 Report - Certification by Lori Myott, Manager, Environmental Services Department, Responsible Official - Deviation and CAM Summary Reports. For Eckert, Units 4, 5 and 6 operated. Unit 4 - opacity exceedances reported for startup and shutdown (longest was 12 min on 1/24/18 for a startup). Unit 5 - opacity exceedances reported for unit startup, boiler upset, and ESP tripping off (longest was 2 events - 24 min & 30 min on 3/7/18) and COMS monitor downtime during unit shutdown. Unit 6 - opacity exceedances reported for startup, shutdown, and ESP tripping off (longest was 18 min on 4/16/18 for the ESP) and COMS downtime during unit shutdown. Corrective actions taken included adjusting air flow and to reset and restart the ESP.
08/17/2018	Stack Test	Compliance	Visible Emissions (VE) Compliance Test for EUCOAL required per 40 CFR 60, Subpart Y. 0% opacity observed.
08/16/2018	Stack Test	Compliance	2nd quarter MATS test for EUBOILER4. Testing was June 26, 2018. Testing not done on EUBOILER5 as it had less than 168 operating hours in the 2nd quarter. Stack testing results of PM and HCl to meet LEE status need to be less than 50% of the standard under 40 CFR 63, Subpart UUUUU. EUBOILER4 - PM emissions were 0.0133 lb/MMBtu (44% of standard) and HCl emissions were 0.0007 lb/MMBtu (35% of standard).

Activity Date	Activity Type	Compliance Status	Comments
08/15/2018	ROP Qrtly Cert	Compliance	<p>2nd quarter ROP MI-ROP-B2647-2018 report. - Certification by Lori Myott, Manager, Environmental Services Department, Responsible Official - Excess emissions, monitoring systems performance and opacity performance summary. For Eckert, Units 4, 5 and 6 operated. Unit 4 had COMS excess emissions 0.02% of the operating time for a duration of 12 minutes total. Unit 5 had COMS excess emissions 1.40% of the operating time for a duration of 66 minutes total and monitor downtime of 0.13%. Unit 6 had COMS excess emissions 0.07% of the operating time for a duration of 48 minutes total and monitor downtime of 0.02%. No excess emissions were reported for REO Town. For the NOx CEMS at the REO Town Plant - EUTURBINE1, EUTURBINE2, and EUAUXBOILER, monitor downtime reported for all units for other known causes. The highest downtime reported was 1.07% of operating time for the EUAUXBOILER NOx.</p> <p>Linearity Test Reports - All REO Town Plant units passed the linearity testing.</p> <p>DAILY SO2 COMPLIANCE - Highest SO2 emission rate of 0.600 lb/MMBtu from EUBOILER6 reported. SO2 limit is 1.67 lb/MMBtu.</p>
06/26/2018	Stack Test Observation	Compliance	<p>Stack testing of EUBOILER4 and VE testing of EUCOAL at Lansing Board of Water and Light - Eckert Power Station. The testing is required by ROP No. MI-ROP-B2647-2018, 40 CFR 60, Subpart Y, and 40 CFR 63, Subpart UUUUU - MATS.</p>

Activity Date	Activity Type	Compliance Status	Comments
06/15/2018	Stack Test	Compliance	<p>1st quarter 2018 MATS test report for Unit 4 (EUBOILER4). Testing conducted March 13, 2018. Stack testing results of PM and HCl to meet LEE status need to be less than 50% of the standard under 40 CFR 63, Subpart UUUUU. EUBOILER4 - PM emissions were 0.017 lb/MMBtu (57% of standard) and HCl emissions were 0.0007 lb/MMBtu (35% of standard).</p>
06/15/2018	ROP Qrtly Cert	Compliance	<p>1st quarter 2018 ROP No. MI-ROP-B2647-2012c/2018 Report - Certification by Lori Myott, Manager, Environmental Services Department, Responsible Official - Excess emissions, monitoring systems performance and opacity performance summary. For Eckert, Units 4 and 5 operated. Unit 4 had COMS excess emissions 0.02% of the operating time for a duration of 18 minutes total. Unit 5 had COMS excess emissions 1.20% of the operating time for a duration of 102 minutes total. No COMS monitor downtime was reported for Unit 4 and Unit 5 at Eckert. No excess emissions were reported for REO Town. For the NOx CEMS at the REO Town Plant - EUTURBINE1, EUTURBINE2, and EUAUXBOILER, monitor downtime reported for all units. The highest downtime reported was 2.08% of operating time for the EUTURBINE2 NOx pph.</p> <p>Linearity Test Reports - All REO Town Plant units passed the linearity testing.</p> <p>DAILY SO2 COMPLIANCE - Highest SO2 emission rate of 0.504 lb/MMBtu from EUBOILER4 reported. SO2 limit is 1.67 lb/MMBtu.</p>

Activity Date	Activity Type	Compliance Status	Comments
06/15/2018	Stack Test	Compliance	2nd quarter MATS test reports for Unit 6, EUBOILER6. Testing conducted April 25 and 26, 2018. Stack testing results of PM and HCl to meet LEE status need to be less than 50% of the standard under 40 CFR 63, Subpart UUUUU. EUBOILER6 - PM emissions were 0.0076 lb/MMBtu (25% of standard) and HCl emissions were 0.0007 lb/MMBtu (35% of standard).
04/04/2018	ROP Annual Cert	Compliance	ROP No. MI-ROP-B2647-2012c. Certification signed by Lori Myott, Manager ESD. See Quarterly (CEM) reports and Semi-Annual Reports for any exceedances and deviations.
04/04/2018	ROP SEMI 2 CERT	Compliance	Semi-Annual 2 Certification for ROP No. MI-ROP-B2647-2012c Report - Certification by Lori Myott, Manager, Environmental Services Department, Responsible Official - Deviation Report. For Eckert, Units 4, 5 and 6 operated. Unit 4 - opacity exceedances reported for startup, shutdown and upset (longest was 18 min on 7/19/17) and COMS monitor down time during unit startup. Unit 5 - opacity exceedances reported for unit startup, load change, boiler upset, and shutdown (longest was 2 events - 18 min on 9/29/17 & 18 min on 9/29-30/17) and COMS monitor down time during unit startup recalibration. Unit 6 - opacity exceedances reported for startup, load change, and soot blowing (longest was 102 min on 8/25/2017) and COMS downtime for repair and recalibration. Corrective actions taken included adjusting air flow, reducing load, and to stop soot blowing. Late PM stack test report.
04/04/2018	MAERS	Compliance	Electronic 3/12; also electronic on 5/16/18. Hard copy 03/27. Responsible Official - Lori Myott, Audited - 5/21/2018
03/13/2018	Stack Test Observation	Compliance	Stack testing of EUBOILER4 at Lansing Board of Water and Light - Eckert Power Station. The testing is required by ROP No. MI-ROP-B2647-2018 and 40 CFR 63, Subpart UUUUU - MATS.

Activity Date	Activity Type	Compliance Status	Comments
03/01/2018	MACT (Part 63)	Compliance	2nd Semi-annual MATS compliance report for Eckert boiler units: EUBOILER4, EUBOILER5, and EUBOILER6. Mercury monitor downtime on EUBOILER4 and EUBOILER5 was greater than 5% so a complete emissions report for the period was submitted. Most recent boiler tune-ups: EUBOILER4 on 9/11-12/2015, EUBOILER5 on 9/17/2015, and EUBOILER6 on 9/18-19/2015.
01/17/2018	Stack Test	Compliance	Fourth quarter 2017 MATS test report for Unit 4 (EUBOILER4) and Unit 5 (EUBOILER5). Testing conducted Nov. 21 and 28, 2017. Stack testing results of PM and HCl to meet LEE status need to be less than 50% of the standard under 40 CFR 63, Subpart UUUUU. EUBOILER4 - PM emissions were 0.0032 lb/MMBtu (11% of standard) and HCl emissions were 0.0008 lb/MMBtu (40% of standard). EUBOILER5 - PM emissions were 0.0200 lb/MMBtu (67% of standard) and HCl emissions were 0.0010 lb/MMBtu (50% of standard). EUBOILER6 did not operate during the 4th quarter.

Name:

Julie C. Brown

Date:

11/17/19

Supervisor:

