

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

FCE Summary Report

Facility : LBWL, Erickson Station and Delta Energy Park	SRN : B4001
Location : 3725 South Canal Road	District : Lansing
	County : EATON
City : LANSING State: MI Zip Code : 48917	Compliance Status : Compliance
Source Class : MAJOR	Staff : Julie Brunner
FCE Begin Date : 5/9/2022	FCE Completion Date : 5/9/2023
Comments :	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
04/19/2023	CEM RATA	Compliance	EUCTGHRSG2 Bypass Stack RATA Test Report. Passed relative accuracy for O2 and NOx.
04/19/2023	Excess Emissions (CEM)	Compliance	1st QTR Excess Emissions and Monitoring Systems Performance Report for PTI 74-18D. EUCTGSC1 (LME Unit), EUCTGHRSG2 & EUCTGHRSG3 Combined Cycle and Simple Cycle. Not on ROP. EUCTGHRSG2 - highest monitor downtime for NOx pph (24-hr) was 13.20 hrs, 7.51% of operating time; no excess emissions except for NOx ppm (24-hr) for 1.00 hr, 0.19% of operating time which was insignificant and not a Rule 912 reportable. (Max value 3.8 ppm reason startup/shutdown) EUCTGHRSG3 - highest monitor downtime for NOx pph (1-hr) and NOx ppm (30-day) was 6.58 hrs, 1.48% of operating time; no excess emissions

Activity Date	Activity Type	Compliance Status	Comments
03/24/2023	Other Non ROP	Compliance	Semi-Annual CAFO Compliance Report. Lori Myott RO - System-wide 2022 emissions:788.1 tons NOx & 2756 tons SO2 both below annual limits. Highest NOx emission was 0.149 lbs/MMBTU (30-day rolling) <0.170 lb/MMBTU. Highest SO2 emission was 0.604 lbs/MMBTU (30-day rolling average). Per the CAFO signed on 9-30-2019 and PTI 43-20, the SO2 limit of 0.749 lbs/MMBTU (30-day rolling average) applies.
03/22/2023	On-site Inspection	Compliance	Compliance inspection of LBWL – Erickson Station and Delta Energy Plant (DEP) as part of a Full Compliance Evaluation (FCE)
03/13/2023	MAERS	Compliance	2022 MAERS received electronically. Audited
02/07/2023	Excess Emissions (CEM)	Non Compliance	4th QTR Excess Emissions and Monitoring Systems Performance Report for PTI 74-18D. EUCTGSC1 (LME Unit), EUCTGHRSG2 & EUCTGHRSG3 Combined Cycle and Simple Cycle. Not on ROP. VN sent for excess NOx emissions from EUCTGHRSG3.
01/23/2023	MACT (Part 63)	Compliance	Semi-Annual 2022 (hard copy rec'd 1-13-23) - MATS report for Erickson Station (EU001) with Mercury excess emissions and sorbent trap monitoring downtime summaries. No new fuel burned, and last boiler tune-up completed September 16, 2020. 3rd & 4th Quarterly testing results for HCl and annual test done in the 4th quarter for PM (LEE). No deviations from the Hg emission limit of 1.2 lbs/TBtu. Hg monitor - no excess emissions & downtime of 3 hrs (0.08%) due to equipment malfunctions and QA/QC tests.

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01/17/2023	ROP SEMI 2 CERT	Compliance	Semi-Annual Report Certification for MI-ROP B4001-2015. Includes MATS, CAM, FGASHHANDLING & Ash Handling: FGASHHANDLING Compliance Report. Lori Myott RO. *hard copy rec'd 1-13-23* No Deviations for EU001, CAM Ash Handling: FGASHHANDLING - no excursion/exceedances. EU001 was retired on November 28, 2022. AQD voided the Acid Rain Permit No. MI-AR-1832-2015. As of the retirement date of November 28, 2022, EU001 shall not emit any sulfur dioxide and nitrogen oxides.
01/11/2023	ROP Qrtly Cert	Compliance	4th Quarter Excess Emissions and Monitoring Systems Performance Report and Daily SO2 Compliance - Erickson Boiler COMS reports for ROP No. MI-ROP-B4001-2015. No excess emissions for EU001. COMS monitor downtime was 36 mins/0.04% of operating time, Highest SO2 emission was 0.558 lbs SO2/MMBTU (30-day rolling average), the SO2 limit of 0.604 lbs/MMBTU (30-day rolling average) applies.
01/09/2023	Excess Emissions (CEM)	Compliance	3rd Quarter Excess Emissions and Monitoring Systems Performance Report for sources EUCTGSC1 (LME Unit), EUCTGHRSG2 & EUCTGHRSG3 Combined Cycle and Simple Cycle. Not on ROP - requested report for DEP.
12/22/2022	CEM RATA	Compliance	EUCTGHRSG3 Bypass Stack RATA Test Report. Passed relative accuracy for O2 and NOx.
12/13/2022	ROP Other	Compliance	Acid Rain Permit voided - Request to void because EU001 retired 12/28/2022
12/07/2022	Stack Test	Compliance	2022 4th Quarter MATS Testing (HCl only due to PM LEE Status). HCl emission rate measured: 0.0010 lb/MMBtu.
11/01/2022	CEM RATA	Compliance	*electronic copy rec'd 10-19-22* 2022 Mercury Sorbent Trap RATA. Within the relative accuracy criteria.

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11/01/2022	Stack Test	Compliance	*electronic copy rec'd 10-19-22* 3rd quarter MATS PM & HCl emissions test report. Annual CAFO CAA-05-2019-0400 PM test report (maintaining PM LEE Status) for Unit 1 Stack. PM emission rate measured: 0.0015 lb/MMBtu. HCl emission rate measured: 0.0011 lb/MMBtu.
11/01/2022	Stack Test	Compliance	EUCTGSC1 Stack Test report for PM2.5 and PM10 - Delta Energy Park, PTI 74-18C. PM2.5&PM10 emissions = 1.329 pph *Hard copy rec'd 11-4-22*
11/01/2022	Stack Test	Compliance	EUCTGHRSG3 bypass stack test report for CO, PM2.5/PM10, and VOC - Delta Energy Park, PTI 74-18C. CO emissions = 1.9 pph PM2.5&PM10 emissions = 2.716 pph VOC emissions = 0.1 pph *Hard copy rec'd 11-4-22*
11/01/2022	Stack Test Observation	Compliance	Utility MACT testing of EU001 - HCl
10/27/2022	CEM RATA	Compliance	*electronic copy rec'd 10-19-22* RATA test report for the Erickson Station on Unit 1 for CO2, SO2, NOX, and volumetric flow analyzers during the specified operating conditions. Demonstrated the relative accuracies.
10/20/2022	Stack Test	Compliance	Compliance emissions test report for EUCTGSC1 (DEPS1 Stack) 40 CFR 63 YYYY Formaldehyde testing - Delta Energy Park, PTI No. 74-18C. Formaldehyde testing results - 14.9 ppbvd @ 15% O2.
10/20/2022	Stack Test	Compliance	Compliance emissions test report for EUCTGHRSG2 (DEPS2) Stack 40 CFR 63 YYYY Formaldehyde testing - Delta Energy Park, PTI No. 74-18C. Formaldehyde testing results - 35.9 ppbvd @ 15% O2.
10/20/2022	Stack Test	Compliance	Compliance emissions test report for EUCTGHRSG3 (DEPS3) Stack 40 CFR 63 YYYY Formaldehyde testing - Delta Energy Park, PTI No. 74-18C. Formaldehyde testing results - 54.5 ppbvd @ 15% O2.

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10/20/2022	ROP Qrtly Cert	Compliance	3rd Quarter Excess Emissions and Monitoring Systems Performance Report and Daily SO2 Compliance - Erickson Boiler COMS reports for ROP No. MI-ROP-B4001-2015. No excess emissions for EU001. COMS monitor downtime was 132 mins/0.10% of operating time, Highest SO2 emission was 0.564 lbs SO2/MMBTU (30-day rolling average), the SO2 limit of 0.604 lbs/MMBTU (30-day rolling average) applies. *hard copy rec'd 11-1-22*
09/20/2022	Stack Test Observation	Compliance	Stack Test Observation at DEP (B4001) - EUCTGSC1. Testing required by PTI 74-18B, Test protocol approved 3/10/2022.
09/09/2022	MACT (Part 63)	Compliance	Semi-Annual 2022 (electronic copy rec'd 9-6-22) (hard copy rec'd 9-8-22) - MATS report for Erickson Station (EU001) with Mercury excess emissions and sorbent trap monitoring downtime summaries. No new fuel burned, and last boiler tune-up completed September 16, 2020. 1st & 2nd Quarterly testing results for HCl and none for PM (LEE). No deviations from the Hg emission limit of 1.2 lbs/TBtu. Hg monitor - no excess emissions & downtime of 302.13 hrs (9.27%) due to equipment malfunctions and sorbent trap analysis not passing all QA/QC tests. Downtime just below the 10% criteria for excessive.

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09/09/2022	ROP Semi 1 Cert	Compliance	<p>Semi-Annual Report Certification for MI-ROP B4001-2015. Includes MATS, CAM, FGASHHANDLING & CAFO Compliance Report. Lori Myott RO - No Deviations for EU001, CAM Ash Handling: FGASHHANDLING - CAM excursion/exceedances for EUASHDC1, EUASHDC2 and EUASHDC4 but no VEs observed and no monitor downtime. CAM excursion/exceedances none for opacity and 5 events for opacity downtime the longest of which was 18 mins on 5/17/2022 for EU001.</p> <p>CAFO - System-wide 1 Semi-2022 emissions report:474.4 tons NOx & 1561.6 tons SO2 both below annual limits. Highest NOx emission was 0.153 lbs/MMBTU (30-day rolling) <0.170 lb/MMBTU. Highest SO2 emission was 0.574 lbs/MMBTU (30-day rolling average). Per the CAFO signed on 9-30-2019 and PTI 43-20, the SO2 limit of 0.749 lbs/MMBTU (30-day rolling average) applies.</p>
09/01/2022	Stack Test Observation	Compliance	<p>Stack Test Observation at DEP (B4001) - EUCTGHR1G2, 63 YYYY - formaldehyde, Test protocol approved 8/25/2022. Run 1 started at 0856 local time (0756 CEMS time) and spike recovery of 74.5 %(minimum is 70%). Process data being collected and running 50 MW (due to higher ambient temps this is max achievable) when left. Prelim results - Run 1 was -16.2 ppbvd @ 15% O2; Run 2 was 38.0 ppbvd @ 15% O2 and projected to pass (limit is 91 ppbvd @ 15% O2). Data sent to Lindsey. Data collected located here: S:\@District Facilities\B4001\Reports\YYYY Stack Testing 9-1-22.</p>
08/24/2022	CEM RATA	Compliance	<p>RATA test report for the EUCTGHRSG2 Combined Cycle Stack. PTI 74-18C. Passed relative accuracy for O2 and NOx (which was a re-test).</p>

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08/05/2022	MACT (Part 63)	Compliance	40 CFR Part 63 Subpart DDDDD Notification of Compliance Status, Initial Tune-Up Completion-EUAUXBOILER, PTI 74-18C. Unit start-up date is 10/6/2021. Initial boiler tune-up and burner inspection occurred on 3/29/22.
08/05/2022	Excess Emissions (CEM)	Non Compliance	<p>Semi-Annual Excess Emissions & Downtime Report for PTI 74-18C, EUCTGSC1 - no CEMS; EUCTGHRSG2: NOx limit 25 ppm (4-hr) KKKK - No excess emissions, downtime duration 6.43 hrs (2.35% of operating time) NOx limit 3 ppm (24-hr) - excess emissions duration 653.00 hrs (38.83% of operating time) and downtime duration 117.00 hrs (6.96% of operating time) CO - No excess emissions, downtime duration 105.00 hrs (6.22% of operating time) EUCTGHRSG3: NOx limit 25 ppm (4-hr) KKKK - excess emissions reported (but less than 25 ppm?) duration 16.00 hrs (8.66% of operating time) 14.0 hrs of which were startup/shutdown (less than 75% of peak load) and downtime duration 16.43 hrs (8.89% of operating time) NOx limit 3 ppm (24-hr) - excess emissions duration 343.00 hrs (22.85% of operating time) and downtime duration 347.00 hrs (23.12% of operating time) CO - No excess emissions, downtime duration 354.00 hrs (23.44% of operating time).</p> <p>Linearity tests submitted. No information on mass measurements for NOx or CO submitted.</p> <p>VN needed for exceedance of the NOx limit 3 ppm (24-hr) on EUCTGHRSG2 and EUCTGHRSG3.</p>

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07/26/2022	ROP Qrtly Cert	Compliance	2nd Quarter Excess Emissions and Monitoring Systems Performance Report and Daily SO2 Compliance - Erickson Boiler COMS reports for ROP No. MI-ROP-B4001-2015. No excess emissions. COMS monitor downtime was 48 mins/0.04% of operating time, Highest SO2 emission was 0.564 lbs SO2/MMBTU (30-day rolling average), the SO2 limit of 0.749 lbs/MMBTU (30-day rolling average) applies.
07/19/2022	Stack Test	Compliance	Q2 2022 MATS, HCl only (due to PM LEE status) emissions test report for Unit 1 stack for MI-ROP-B4001-2015. (electronic copy rec'd 6-29-22) (hard copy rec'd 7-18-22).
06/07/2022	CEM RATA	Compliance	Test report for EUCTGHRSG2 combined cycle stack. Passed relative accuracy for CO, and O2. NOx will be re-tested due to expired NOx cylinder.
05/24/2022	Stack Test	Compliance	EUCTGSC1 Stack Test Report for NOx, CO and VOC. Compliance demonstrated with emission limits in PTI 74-18B.
05/17/2022	Telephone Notes	Compliance	Delta Energy Plant still off-line. Started 4/14/2022 due to gear box malfunction. Discussed modifying PTI for Auxboiler testing and also going to add a testing extension request for the turbines because deadline for testing is 5/22/2022. Update on Erickson closure - tentatively looking at mid-December but if receive 120-day notification from EPA, the shutdown could be earlier.
05/10/2022	CEM RATA	Compliance	Test report for EUCTGHRSG3 combined cycle stack. Passed relative accuracy for CO, O2 and NOx.

Name: Julie L Brunner Date: 5/9/2023

Supervisor: RB