

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

FCE Summary Report

Facility : J.B. Sims Generating Station		SRN : B1976
Location : 1231 N. Third St.		District : Grand Rapids
		County : OTTAWA
City : GRAND HAVEN	State: MI	Zip Code : 49417
Compliance Status :		Compliance
Source Class : MAJOR	Staff : Kaitlyn DeVries	
FCE Begin Date : 12/18/2018	FCE Completion Date :	11/13/2019
Comments : FY 20 FCE		

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
11/08/2019	Stack Test	Compliance	<p>The 3rd Quarter PM Stack Test report pursuant to MI-ROP-B1976-2018 and 40 CFR Part 63 Subpart UUUUU (MATS) was received on time and complete. Testing was only for PM as the facility tripped and went into an unexpected early outage before HCl testing could be conducted. Testing for HCl will be made up during Quarter 4.</p> <p>The report indicates a PM emission rate of 0.0027 lbs/MMBTU, which is compliant with the MATS limit of 0.03 lbs/MMBTU and the Low Emitting Electric Generating Unit (LEE) limit of 0.015 lbs/MMBTU. A total of three consecutive years of quarterly testing is required to obtain LEE Status for a particular pollutant.</p>

Activity Date	Activity Type	Compliance Status	Comments
11/08/2019	Excess Emissions (CEM)	Compliance	<p>The 3rd quarter Excess Emission report was received on time and complete. The linearity test and cylinder gas audit were also included; no issues were noted for either. The facility only operated for 962 hours during the reporting period.</p> <p>The CO2 outlet, for which there is not an applicable emission limit, and the CO2 inlet reported zero (0) excess emissions and no CEMS monitor downtime.</p> <p>There is a 20% opacity limit for the unit. No excess emissions or COMS downtime was reported for the quarter.</p> <p>NOx emissions are limited to a 30-day rolling average of 0.46 lb/MMBTU. One (1) hour (0.10%) of CEMS monitor downtime was reported due to Quality Assurance Calibration; no excess emissions were reported for the reporting period. The average emissions for the period was 0.0333 lb/MMBTU.</p> <p>SO2 outlet has a limit of 0.84 lb/MMBTU and 0.600 lb/MMBTU, both 30 day rolling averages. The average SO2 emissions for the reporting period was 0.221 lb/MMBTU accounting for an average SO2 removal efficiency of 94.6%. No excess emission were reported for SO2, but there was a total of 0.62% CEM monitor downtime due to unit trips and calibrations.</p>
10/29/2019	Scheduled Inspection	Compliance	The purpose of the inspection was to determine compliance with MI-ROP-B1976-2018.
10/29/2019	Stack Test Observation	Compliance	Stack Test Observations.

Activity Date	Activity Type	Compliance Status	Comments
09/26/2019	ROP Semi 1 Cert	Compliance	The Semi-Annual Compliance Report was received on time and complete. Two (2) deviations were reported for the reporting period. The deviations were for EU-UNIT-3-BLR. One of the deviations was due to dirty opacity optics causing failed calibrations. Once the optics were cleaned calibrations passed. The other deviation was for a failure of the monitoring equipment due to a plugged probe. The probe was replaced and it ran successfully.
09/26/2019	CAM Excursions/Exceedances	Compliance	The CAM excursion and exceedance report was received on time and complete. No excursions or exceedances were reported for the reporting period.
09/26/2019	CAM monitor downtime	Compliance	The CAM monitor downtime report was received on time and complete. The COMS unit was reported down due to the dirty optics, which were subsequently cleaned. The total downtime lasted for 42 - 6-minute time periods.
09/26/2019	MACT (Part 63)	Compliance	The Semiannual Compliance with 40 CFR Part 63 Subpart UUUUUU for MATS was received on time and complete. The facility burned bituminous north Appalachian coal and natural gas during the reporting period. In total, 37,073.774 tons of coal and 1,097,000 ccf of natural gas was burned. The boiler was most recently tuned up in April 2018, and performance testing was completed for the first and second quarters for HCL and PM, as required. The facility is currently LEE for Hg, but the most recent annual testing has not been completed due to mechanical issues with the boiler. No deviations for MATS were reported. No further action is necessary.

Activity Date	Activity Type	Compliance Status	Comments
08/06/2019	MACT (Part 63)	Compliance	<p>The 2nd Quarter PM and HCl Stack Test report pursuant to MI-ROP-B1976-2018 and 40 CFR Part 63 Subpart UUUUU (MATS) was received on time and complete.</p> <p>The report indicates a PM emission rate of 0.0027 lbs/MMBTU, which is compliant with the MATS limit of 0.03 lbs/MMBTU and the Low Emitting Electric Generating Unit (LEE) limit of 0.015 lbs/MMBTU. The report also indicates a HCl emission rate of 0.0000638 lbs/MMBTU, which is compliant with the MATS limit of 0.0020 lbs/MMBTU and the LEE limit of 0.0010 lb/MMBTU. A total of three consecutive years of quarterly testing is required to obtain LEE Status for a particular pollutant.</p>

Activity Date	Activity Type	Compliance Status	Comments
08/06/2019	Excess Emissions (CEM)	Compliance	<p>The 2nd quarter Excess Emission report was received on time and complete. The linearity test and cylinder gas audit were also included; no issues were noted for either. The facility only operated from May 30th to June 30th reporting a total operating time of 751 hours for the reporting period.</p> <p>The CO2 outlet, for which there is not an applicable emission limit, and the CO2 inlet reported zero (0) excess emissions and no CEMS monitor downtime.</p> <p>There is a 20% opacity limit for the unit. No excess emissions or CEMS downtime was reported for the quarter.</p> <p>NOx emissions are limited to a 30-day rolling average of 0.46 lb/MMBTU. No CEMS monitor downtime or excess emissions were reported for the reporting period. The average emissions for the period was 0.0342 lb/MMBTU.</p> <p>No excess emissions or monitor downtime was reported for the SO2 inlet or outlet. The SO2 outlet has a limit of 0.84 lb/MMBTU and 0.600 lb/MMBTU, both 30 day rolling averages. The average SO2 emissions for the reporting period was 0.167 lb/MMBTU accounting for an average SO2 removal efficiency of 95.9%.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/08/2019	MACT (Part 63)	Compliance	<p>The 1st Quarter PM and HCl Stack Test report pursuant to MI-ROP-B1976-2018 and 40 CFR Part 63 Subpart UUUUU (MATS) was received on time and complete.</p> <p>The report indicates a PM emission rate of 0.0061 lbs/MMBTU, which is compliant with the MATS limit of 0.03 lbs/MMBTU and the Low Emitting Electric Generating Unit (LEE) limit of 0.015 lbs/MMBTU. The report also indicates a HCl emission rate of 0.000253 lbs/MMBTU, which is compliant with the MATS limit of 0.0020 lbs/MMBTU and the LEE limit of 0.0010 lb/MMBTU. A total of three consecutive years of quarterly testing is required to obtain LEE Status for a particular pollutant.</p>

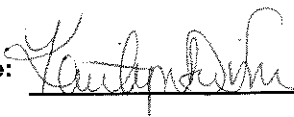
Activity Date	Activity Type	Compliance Status	Comments
05/08/2019	Excess Emissions (CEM)	Compliance	<p>The first quarter Excess emission report was received on time and complete. The linearity test and cylinder gas audit were also included; no issues were noted for either. The facility reported a total operating time of 1370 hours for the reporting period. The plant went into a scheduled shutdown on March 1, 2019.</p> <p>The CO2 outlet, for which there is not an applicable emission limit, and the CO2 inlet reported zero (0) excess emissions with a total of four (4) hours (0.29%) CEMS monitor downtime.</p> <p>There is a 20% opacity limit for the unit. No excess emission were reported for the quarter, but a total of 0.31% monitor downtime was reported due equipment malfunctions and associated recalibrations.</p> <p>NOx emissions are limited to a 30-day rolling average of 0.46 lb/MMBTU. No CEMS monitor downtime or excess emissions were reported for the reporting period. The average emissions for the period was 0.0373 lb/MMBTU.</p> <p>No excess emissions or monitor downtime was reported for the SO2 inlet or outlet. The SO2 outlet has a limit of 0.84 lb/MMBTU and 0.600 lb/MMBTU, both 30 day rolling averages. The average SO2 emissions for the reporting period was 0.077 lb/MMBTU accounting for an average SO2 removal efficiency of 98.1%.</p>

Activity Date	Activity Type	Compliance Status	Comments
02/12/2019	ROP Annual Cert	Compliance	The Annual compliance report pursuant to MI-ROP-B1976-2018 was received on time and complete. A total of 32 deviations were reported for the reporting period. All of the deviations were previously reported and were primarily due to startups shutdowns. The deviations were for missing CO2, SO2, NOx, and Opacity COMS issues. None of the deviations resulted in any emissions exceedances. No further action is necessary at this time.
02/12/2019	ROP SEMI 2 CERT	Compliance	The semi-annual compliance report pursuant to MI-ROP-B1976-2018. A total of 8 deviations were reported for the reporting period. Several of the deviations were the same, but occurred on different days. The deviations were due to missing 6-minute averages for COMS, missing SO2 data, and opacity exceedances. The COMS and the Opacity issues were due to low temperatures and likely false readings of opacity due to water vapor. The Missing CO2 and SO2 data was due to startup and shutdown issues on one of the days.
02/12/2019	CAM Excursions/Exceedances	Compliance	This report was received on time and complete. A CAM excursion was reported for July 5, 2019 for the boiler, and it was for seven (7) 6-minute periods of excess opacity where there was low exhaust temperatures due to startup. The facility maintains that these were false readings and the opacity was due to water vapor.
02/12/2019	CAM monitor downtime	Compliance	This report was received on time and complete. Four (4) instances of CAM monitor downtime was reported, all for the boiler. Two (2) of the instances were due to plant trips and trying to get the plant running again, so there was incomplete 6-minute averages for the COMs, and the other two (2) instances were due to unknown causes but the system self-corrected. No further action is necessary at this time.

Activity Date	Activity Type	Compliance Status	Comments
02/12/2019	MACT (Part 63)	Compliance	<p>Semiannual MATS compliance report for Unit 3 pursuant to MI-ROP-B1976-2018 and 40 CFR Part 63 Subpart UUUUU was received on time and complete. Only bituminous norther Appalachian coal and natural gas was used in the boiler. The facility burned a total of 40,725.201 tons of coal and 3,934,000 ccf of natural gas during the reporting period for a total operating time of 2058.76 hours. The unit was shutdown from September 1, 2018 to November 29, 2018. The most recent boiler tune up was completed on April 13, 2018. The facility has successfully conducted performance tests during the third and fourth quarters of 2018, as required to demonstrate compliance with the PM and HCl. The facility is currently a low emitting electrical generating unit for mercury as compliance tests have demonstrated three (3) successful years of low emitting status.</p>
01/24/2019	Stack Test	Compliance	<p>The 4th Quarter PM and HCl Stack Test report pursuant to MI-ROP-B1976-2018 and 40 CFR Part 63 Subpart UUUUU (MATS) was received on time and complete.</p> <p>The report indicates a PM emission rate of 0.0055 lbs/MMBTU, which is compliant with the MATS limit of 0.03 lbs/MMBTU and the Low Emitting Electric Generating Unit (LEE) limit of 0.015 lbs/MMBTU. The report also indicates a HCl emission rate of 0.000359 lbs/MMBTU, which is compliant with the MATS limit of 0.0020 lbs/MMBTU and the LEE limit of 0.0010 lb/MMBTU. A total of three consecutive years of quarterly testing is required to obtain LEE Status for a particular pollutant.</p>

Activity Date	Activity Type	Compliance Status	Comments
01/24/2019	Excess Emissions (CEM)	Compliance	<p>The facility submitted a revised 3rd quarter excess emissions report. The revisions include a change to the total source operating time, a change from 3550.62 hours to 1495 hours. This changes the monitor downtime percentages.</p> <p>The CO2 outlet CEMS monitor downtime changes from a previously reported 0.03% to 0.07%. The Opacity (COMS) monitor downtime changes from a previously reported 0.03% monitor downtime to 0.08%, with reported 0.047% excess emission, but the facility maintains its report that these were false readings due to high water vapor from low exhaust temperatures. No other changes were reported.</p>

Activity Date	Activity Type	Compliance Status	Comments
01/24/2019	Excess Emissions (CEM)	Compliance	<p>The fourth quarter Excess emission report was received on time and complete. The linearity test and cylinder gas audit were also included; no issues were noted for either. The facility reported a total operating time of 776 hours for the reporting period.</p> <p>The CO2 outlet, for which there is not an applicable emission limit, and the CO2 inlet reported zero (0) excess emissions and no CEMS monitor downtime for either the inlet or the outlet.</p> <p>There is a 20% opacity limit for the unit. No excess emission were reported for the quarter, but a total of 0.03% monitor downtime was reported due to issues at startup, and computer glitches. There were only two (2) of these instances reported, lasting from 2-3 minutes.</p> <p>NOx emissions are limited to a 30-day rolling average of 0.46 lb/MMBTU. No CEMS monitor downtime or excess emissions were reported for the reporting period. The average emissions for the period was 0.0336 lb/MMBTU.</p> <p>No excess emissions or monitor downtime was reported for the SO2 inlet or outlet. The SO2 outlet has a limit of 0.84 lb/MMBTU and 0.600 lb/MMBTU, both 30 day rolling averages. The average SO2 emissions for the reporting period was 0.076 lb/MMBTU accounting for an average SO2 removal efficiency of 98.2%.</p>

Name:  Date: 11/13/2019 Supervisor: 