N6631 MAWILA-FCE

DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

FCE Summary Report

Facility :	DEARBORN INDUSTR	RIAL GENERATION		SRN:	N6631
Location :	2400 MILLER RD			District :	Detroit
				County:	WAYNE
City: D	EARBORN State:	MI Zip Code: 4812	21 Comp Status	liance s :	Compliance
Source Clas	s: MAJOR		Staf	ff: Jonath	an Lamb
FCE Begin D	Date: 5/15/2018		FCE Date	Completion e :	5/15/2019
Comments :	FCE, FY 2019				

List of Partial Compliance Evaluations:

Activity Date	Activity Type	Compliance Status	Comments
05/15/2019	Scheduled Inspection	Compliance	FCE inspection, FY 2019

Activity Date	Activity Type	Compliance Status	Comments
05/09/2019	Stack Test	Compliance	Revised results of formaldehyde testing performed December 4-6, 2018, on EU-BOILER1, EU-BOILER2, EU-BOILER3, EUCTG1, EUCTG2, and EUCTG3, as required per PTI No. 163-17, FGPLANT, V.1, to satisfy the "winter" testing required to be completed by January 30, 2019. Testing was performed by Montrose Air Quality Services and observed by Jon Lamb, AQD-Detroit Office, and Mark Dziadosz, AQD-TPU.
			The results were originally received by AQD on February 4, 2019; however, upon review by Gina Angellotti, AQD-TPU, it was determined that some data was missing/inaccurate so AQD requested DIG to submit a revised report.
			The boilers were fired on a blend of blast furnace gas and natural gas, while the turbines were fired on natural gas only. Based on the results, the following formaldehyde emission factors were verified: EU-BOILER1 (Boiler 1100): 1.29x10-4 lb/MMBtu; EU-BOILER2 (Boiler 2100): 1.74x10-4 lb/MMBtu; EU_BOILER3 (Boiler 3100): 8.08x10-5 lb/MMBtu; EUCTG1 (Turbine 1100): 2.07x10-4 lb/MMBtu; EUCTG2 (Turbine 2100): 1.09x10-4 lb/MMBtu; and EUCTG3 (Turbine 3100): 1.11x10-4 lb/MMBtu.
			Note: the "winter" emission factors are higher than the "summer" emission factors determined during the testing in August 2018.

Activity Date	Activity Type	Compliance Status	Comments
05/06/2019	Excess Emissions (CEM)	Compliance	1st Quarter 2019 - Part 60 Excess Emissions and RAA Report. Facility reported the following excess emissions/percent monitor downtimes for the following CEMS units: GTP1: 0% EE/0% downtime (1328 total operating hours); GT2: 0% EE/0% downtime (2087 total operating hours); GT3: 0% EE/0% downtime (2079 total operating hours); BLR1: 0% EE/0% downtime (1086 total operating hours); BLR2: 0% EE/0% downtime (1537 total operating hours); and BLR3: 0% EE/0.0% downtime (1579 total operating hours). Report was reviewed by Gina Angellotti, AQD-TPU, on May 6, 2019, and determined to be in compliance.
02/08/2019	Excess Emissions (CEM)	Compliance	4th Quarter 2018 - Part 60 Excess Emissions and RAA Report. Facility reported the following excess emissions/percent monitor downtimes for the following CEMS units: GTP1: 0% EE/0.19% downtime (~1183 total operating hours); GT2: 0% EE/0% downtime (~1763 total operating hours); GT3: 0% EE/0.01% downtime (~1732 total operating hours); BLR1: 0% EE/0% downtime (1409 total operating hours); BLR2: 0% EE/0% downtime (~1962 total operating hours); and BLR3: 0% EE/0.03% downtime (~946 total operating hours). Report was reviewed by Gina Angellotti, AQD-TPU, on February 4, 2019, and determined to be in compliance.

Activity Date	Activity Type	Compliance Status	Comments
01/16/2019	Stack Test	Compliance	Results of formaldehyde testing performed August 21-23, 2018, on EU-BOILER1, EU-BOILER2, EU-BOILER3, EUCTG1, EUCTG2, and EUCTG3, as required per PTI No. 163-17, FGPLANT, V.1, to satisfy the "summer" testing required to be completed by January 30, 2019. Testing was performed by BTEC Inc. and observed by Jon Lamb, AQD-Detroit Office, and Mark Dziadosz, AQD-TPU.
			The boilers were fired on a blend of blast furnace gas and natural gas, while the turbines were fired on natural gas only. Based on results, the following formaldehyde emission factors were verified: EU-BOILER1: 4.21x10-5 lb/MMBtu; EU-BOILER2: 3.30x10-5 lb/MMBtu; EU_BOILER3: 4.35x10-5 lb/MMBtu; EUCTG1: 6.72x10-5 lb/MMBtu; EUCTG2: 5.82x10-5 lb/MMBtu; and EUCTG3: 5.41x10-5 lb/MMBtu. QA review of the results was
			performed by Mr. Dziadosz on December 7, 2018.
11/02/2018	Excess Emissions (CEM)	Compliance	3rd Quarter 2018 - Part 60 Excess Emissions and RAA Report. Facility reported the following excess emissions/percent monitor downtimes for the following CEMS units: GTP1: 0% EE/0.55% downtime (~1039 total operating hours); GT2: 0% EE/0.28% downtime (~1941 total operating hours); GT3: 0% EE/1.78% downtime (~1909 total operating hours); BLR1: 0% EE/2.77% downtime (793 total operating hours); BLR2: 0% EE/0.38% downtime (~1392 total operating hours); and BLR3: 0% EE/1.63% downtime (~2114 total operating hours). Report was reviewed by Gina Hines, AQD-TPU, on October 31, 2018, and determined to be in compliance.
09/21/2018	ROP Semi 1 Cert	Compliance	No deviations reported during the compliance period January 1 through June 30, 2018.

Activity Date	Activity Type	Compliance Status	Comments
09/12/2018	Malfunction Abatement Plan	Compliance	Operation and Maintenance Plan was submitted to AQD on July 25, 2018, per PTI No. 163-17, FGPLANT, S.C. III.1, which requires that DIG not operate any unit in FGPLANT unless an O&M Plan has been submitted to AQD and implemented and maintained by July 30, 2018. This submittal meets that requirement.
08/15/2018	Excess Emissions (CEM)	Compliance	2nd Quarter 2018 - Part 60 Excess Emissions and RAA Report. Facility reported the following excess emissions/percent monitor downtimes for the following CEMS units: GTP1: 0% EE/0.08% downtime; GT2: 0% EE/0.4% downtime; GT3: 0% EE/0.1% downtime; BLR1: 0% EE/0.1% downtime; BLR2: 0% EE/0% downtime; and BLR3: 0% EE/0.02% downtime. All monitor downtime was for QA calibration. Report was reviewed by Gina Hines, AQD-TPU, on August 6, 2018, and determined to be in compliance.

Activity Date	Activity Type	Compliance Status	Comments
07/25/2018	Stack Test	Compliance	Results of PM10 and VOC testing on Turbine 1100 (EUCTG1), received on April 11, 2018. Testing was required per PTI No. 8-17, S.C. V1. The test plan was received by AQD via email on January 5, 2018, and testing was performed February 5-9, 2018 by BTEC, Inc., and observed by Jon Lamb, AQD Detroit Office, and Tom Gasloli, AQD-TPU. Results show a PM10 emission rate of 8.99 lb/hr and VOC emission rate of 0.5 lb/hr, in compliance with the permit limits of 9 lb/hr PM10 and 2.8 lb/hr VOC, respectively.
			On 4/13/2018, Mr. Paul Snoes of DIG contacted AQD regarding the PM10 results. Though in compliance with the permit limit, the results were much higher than past testing. Mr. Snoes said the facility believed this to be the result of a small amount of liquid (diesel fuel) in the natural gas fuel line upstream of DIG during testing. DIG is working with DTE to resolve the issue.
			5/11/2018: Facility provided additional information to the test report, including turbine MW load and natural gas flow rate data during testing.
			7/16/2018: The test report was reviewed by Mr. Gasloli on July 16, 2018, and the results were determined to be acceptable.
05/16/2018	MAERS	Compliance	Reviewed 5/16/2018
05/16/2018	ROP Other	Compliance	2017 MAERS Report/ROP Certification Form Received
05/16/2018	Other	Compliance	2017 MAERS review

Name:	Date:	8-15-19	Supervisor:	JK	
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