

P0879

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

FCE

ORANGE

FCE Summary Report

Facility : Dearborn Energy Center	SRN : P0879
Location : 1641 Carroll Shelby Way East	District : Detroit
	County : WAYNE
City : DEARBORN State: MI Zip Code : 48124	Compliance Status : Compliance
Source Class : SM OPT OUT	Staff : Jorge Acevedo
FCE Begin Date : 09/30/2019	FCE Completion Date : 9/30/2020
Comments :	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
09/18/2020	Stack Test	Compliance	<p>DTE Performed Stack Testing at the DTE- Dearborn CEP, LLC facility located in Dearborn, MI on May 18, 2020 to May 21, 2020. DTE Dearborn Facility is a central energy plant with combined heat and power (CHP). Emission tests were performed on two Solar Titan 130 20501S model natural gas-fired CTG with Heat Recovery Steam Generator. Each unit was tested with and without duct burners operating.</p> <p>Pollutants Tested were : PM2.5, NOx, and CO</p> <p>Test Results were:</p> <p>Duct Burners Off</p> <p>EUCTGHRSG1: PM2.5(lb/hr)----- ---- 0.48----- less than 1.06 NOx(ppm)----- ----8.4----- less than 12 NOx(lb/hr)----- ----4.5----- less than 8.84 CO(ppm)----- ----1.0----- less than 15</p> <p>EUCTGHRSG2:</p>

09/18/2020	Stack Test	Compliance	<p>PM2.5(lb/hr)----- -----0.52----- less than 1.06 NOx(ppm)----- -----6.7----- less than 12 NOx(lb/hr)----- -----3.6----- less than 8.84 CO(ppm)----- -----0.6----- less than 15</p> <p>Duct Burners On</p> <p>EUCTGHRSG1: PM2.5(lb/hr)----- -----0.41----- less than 2 NOx(ppm)----- -----15.2----- less than 25 NOx(lb/MMBTU)----- -----0.06----- -----less than 0.12 NOx(lb/hr)----- -----14.92----- less than 19.04 CO(lb/MMBTU)----- -----0.01----- ---less than 0.13</p> <p>EUCTGHRSG2: PM2.5(lb/hr)----- -----0.59----- less than 2 NOx(ppm)----- -----13.4----- less than 25 NOx(lb/MMBTU)----- -----0.05----- -----less than 0.12 NOx(lb/hr)----- -----12.93----- less than 19.04 CO(lb/MMBTU)----- -----0.01----- ---less than 0.13</p> <p>All results were below permit limits</p>
08/27/2020	Stack Test Observation	Compliance	Stack Test- 3rd Quarterly Test
08/27/2020	Scheduled Inspection	Compliance	

07/09/2020	Stack Test	Compliance	<p>DTE Performed Stack Testing at the DTE- Dearborn CEP, LLC facility located in Dearborn, MI on February 10, 2020 to February 19, 2020. DTE Dearborn Facility is a central energy plant with combined heat and power (CHP). Emission tests were performed on two Solar Titan 130 20501S model natural gas-fired CTG with Heat Recovery Steam Generator. Each unit was tested with and without duct burners operating.</p> <p>Pollutants Tested were : PM2.5, NOx, and CO</p> <p>Test Results were:</p> <p>Duct Burners Off</p> <p>EUCTGHRSG1: PM2.5(lb/hr)----- ----0.12----- less than 1.06 NOx(ppm)----- ----8.5----- less than 12 NOx(lb/hr)----- ----4.8----- less than 8.84 CO(ppm)----- ----1.2----- less than 15</p> <p>EUCTGHRSG2: PM2.5(lb/hr)----- ----0.17----- less than 1.06 NOx(ppm)----- ----7.1----- less than 12 NOx(lb/hr)----- ----4.0----- less than 8.84 CO(ppm)----- ----1.1----- less than 15</p> <p>Duct Burners On</p> <p>EUCTGHRSG1: PM2.5(lb/hr)----- ----0.2----- less than 2 NOx(ppm)----- ----12.9----- less than 25 NOx(lb/MMBTU)----- -----0.05-----</p>
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07/09/2020	Stack Test	Compliance	<p>-----less than 0.12 NOx(lb/hr)----- -----12.81----- less than 19.04 CO(lb/MMBTU)----- -----0.2----- --less than 0.13</p> <p>EUCTGHRSG2: PM2.5(lb/hr)----- -----0.13----- less than 2 NOx(ppm)----- -----13.8----- less than 25 NOx(lb/MMBTU)----- -----0.05----- -----less than 0.12 NOx(lb/hr)----- -----13.77----- less than 19.04 CO(lb/MMBTU)----- -----0.01----- --less than 0.13</p> <p>All results were below permit limits</p>
05/20/2020	Stack Test Observation	Compliance	Stack test- 2nd Quarterly Test
05/08/2020	Malfunction Abatement Plan	Compliance	Malfunction Abatement Plan was submitted on March 22, 2020. It appeared to have all the elements that are required by rule 911.
03/27/2020	MAERS	Compliance	<p>MAERS REPORT SUBMITTED MARCH 4, 2020</p> <p>AQD reviewed the MAERS submittal. Facility was constructed in 2019 and began operations in late 2019. Emission calculations were based on emission factors, but the facility will be testing throughout the year so better emission factors will be developed. Emission calculations appeared correct. Lat/Long coordinates were accurate.</p>
02/19/2020	Stack Test Observation	Compliance	Stack Test of HRSG
11/12/2019	NSPS (Part 60)	Compliance	<p>NSPS Notification - 40 CFR 60 Subpart JJJJ</p> <p>Cummin Engine -2019 Model- Maximum Engine Power - 194 hp. Fuel -- Natural Gas</p> <p>Start of Construction - May 14, 2018</p> <p>Initial Startup- October 24, 2019.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/02/2019	NSPS (Part 60)	Compliance	<p>NSPS Notification- 40 CFR 60 Subpart KKKK</p> <p>First of the turbine-generator sets fired on natural gas for commissioning purposes at DTE Dearborn CEP, LLC on September 23, 2019.</p> <p>Start of Construction- May 14, 2018</p> <p>Initial Startup: Turbine 1- September 25, 2019 Turbine 2- September 23, 2019</p>

Name: 

Date: 9-30-20

Supervisor: 