

B2132  
MAW14-FCE

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**FCE Summary Report**

<b>Facility :</b> WYANDOTTE DEPT MUNI POWER PLANT	<b>SRN :</b> B2132
<b>Location :</b> 2555 VAN ALSTYNE	<b>District :</b> Detroit
	<b>County :</b> WAYNE
<b>City :</b> WYANDOTTE <b>State:</b> MI <b>Zip Code :</b> 48192	<b>Compliance Status :</b> Compliance
<b>Source Class :</b> MAJOR	<b>Staff :</b> Stephen Weis
<b>FCE Begin Date :</b> 9/14/2014	<b>FCE Completion Date :</b> 9/14/2015
<b>Comments :</b> The Wyandotte Dept. of Municipal Services Power Plant facility appears to be in compliance with applicable regulations and the terms and conditions of ROP No. MI-ROP-B2132-2010 and the applicable provisions of PTI No. 202-14, which was issued on 7/21/15.	

**List of Partial Compliance Evaluations :**

Activity Date	Activity Type	Compliance Status	Comments
09/14/2015	Scheduled Inspection	Compliance	Compliance inspection of the Wyandotte Department of Municipal Services Power Plant. The Wyandotte Power Plant is scheduled for inspection in FY 2015.
05/28/2015	Other	Compliance	Review of RY 2014 MAERS submittal.
05/28/2015	MAERS	Compliance	
04/07/2015	MACT (Part 63)	Compliance	Wyandotte Municipal Services submitted the 40 CFR Part 63, Subpart ZZZZ Semi-annual report for the semi-annual period from July 1, 2014 through December 31, 2014. The Semi-annual Compliance Report form states that "There were no deviations from any applicable emission or operating limitation during the reporting period." In this report, Wyandotte once again discussed the upgrades to the parametric monitoring/recording systems for the catalyst temperature and pressure drop operating parameters.

04/07/2015	ROP SEMI 2 CERT	Compliance	<p>The Semi-annual ROP Monitoring and Deviation report for the semi-annual period from July 1, 2014 - December 31, 2014 was submitted. There were 7 reported deviations.</p> <p>The first deviation relates to the discovery that the stack diameter for Unit 7 is 110 inches rather than the 75 inches as stated in the ROP. Facility representatives performed ambient air monitoring using the 100 inch dimension, and the results showed compliance for the 1 hour NO2 NAAQS. This issue is being addressed in the ROP renewal application.</p> <p>The second deviation relates to four monitoring opacity exceedances, each of 12 minute duration.</p> <p>The third and fourth reported deviations related to a monitored SO2 exceedance on Unit 8 that occurred on December 2 and 3. AQD-Detroit was previously made aware of this exceedance via a Rule 912 notification. Wyandotte informed AQD of the corrective actions taken to address the issue. Unit 8 had limited operation in 2014, and is scheduled to be permanently shut down; the conditions for this shut down are being addressed via an ongoing PTI application.</p> <p>The remaining three deviations related to the diesel-fired emergency engines, FGWSENGINES. Two of the deviations relate to the monitoring of operating parameters (catalyst temperature and pressure drop). There were short periods during operation of the engines that these parameters were not monitored, as required. These parameters are observed and recorded manually. This situation has been remedied via the installation of control and monitoring system upgrades, which links the output from the temperature and pressure drop monitoring devices to the facility's data collection system.</p>
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04/07/2015	ROP SEMI 2 CERT	Compliance	The final reported deviation relates to the Preventative Maintenance Plan (PMP), which is specified via Appendix A in the permit. The manufacturer of the engines, Caterpillar, performed recommended maintenance of the engines in June 2014, and determined that the maintenance requirements, as specified in Appendix A, may be detrimental to the operation of the engines. A revised PMP was submitted with the ROP renewal application that incorporates Caterpillar's recommendations for proper engine maintenance.
04/07/2015	ROP Annual Cert	Compliance	
02/25/2015	Stack Test	Compliance	<p>The Compliance Emission Test report for the 3 diesel-fired engines (FGWMSSENGINES) was submitted via correspondence dated February 9, 2015. The testing took place from December 16-17, 2014.</p> <p>The catalysts on the engines were replaced for two of the engines (Nos. 1 and 2) on November 21, 2014. The tests showed compliance with the 40 CFR Part 63, Subpart ZZZZ requirement that the catalysts provide a CO destruction efficiency of at least 70%; per the test, the destruction efficiency for Engines 1, 2 and 3 was 96.11%, 95.48% and 93.28%, respectively. The catalyst replacement resulted in much higher destruction efficiencies than in past tests from the last couple of years.</p> <p>The test also established a new NOx emission rate of 26.99 pounds per hour. This emission rate was determined by testing Engine No. 1 for NOx.</p>



Activity Date	Activity Type	Compliance Status	Comments
02/25/2015	Stack Test	Compliance	<p>Wyandotte Municipal Services submitted a Compliance Emission Test report per correspondence dated January 28, 2015. The report summarizes testing that occurred on Units 7 and 8 at the power plant during the time period from November 5-26, 2014.</p> <p>Unit 7 was tested for emissions of particulate matter. The test results showed emissions that are in compliance with the applicable particulate matter emission limits in permit MI-ROP-B2132-2010. Emissions measured during the stack test, in comparison to the permitted limits, are:  0.0017 lbs/MMBTU (0.10 lbs/MMBTU limit)  0.0016 lbs/1,000 lbs @50% excess air (0.078 lbs/1,000 lbs limit)  0.78 lbs/hour (44 lbs/hour limit)</p> <p>Unit 8 was tested for emissions of particulate matter, PM10, VOC and lead. The test results showed emissions that are in compliance with the applicable emission limits in permit MI-ROP-B2132-2010. Emissions measured during the stack test, in comparison to the permitted limits, are:  PM:  0.010 lbs/MMBTU (0.025 lbs/MMBTU limit)  2.92 lbs/hour (9.23 lbs/hour limit)</p> <p>PM10:  0.013 lb/MMBTU (0.025 lb/MMBTU limit)  3.77 lbs/hour (9.23 lbs/hour limit)</p> <p>VOC:  0.50 lbs/hour (8.86 lbs/hour limit)</p> <p>Lead:  0.00078 lbs/hour (0.005 lbs/hour)</p>
11/13/2014	Other	Compliance	Revisions to MAERS submittals.

Activity Date	Activity Type	Compliance Status	Comments
09/22/2014	ROP Semi 1 Cert		<p>The facility submitted their semi-annual deviation report for the 1st and 2nd Quarter of 2013.</p> <p>For Unit 8, there were two reported deviations - one for CO emissions, and the other for NOx emissions. For each type of deviation, a copy of the Exceedance Event report was included for each pollutant. For CO, the facility reported five incidents during which the applicable CO standard was exceeded. the first four were attributed to boiler start up or shut down and totaled 35 hours of operating time (the facility has discussed the monitoring of CO during start up/shut down with AQD and EPA and is trying to clarify their monitoring requirements during these times). The fifth involved an issue with fuel feed, and lasted for 22 hours. For NOX, the facility reported one exceedance that was attributed to wet coal, and lasted for 13 hours.</p> <p>Unit 7 has been firing natural gas exclusively for over a year. There was a reported opacity deviation that lasted for 12 minutes that was attributed to a boiler upset.</p>
09/22/2014	MACT (Part 63)	Compliance	<p>The Wyandotte Department of Municipal Services submitted a 2014 semi-annual report for 40 CFR Part 63, Subpart ZZZZ, a regulation that the engines in Flexible Group FGWMSENGINES are subject to. The report cover form states that there were no deviations from any applicable emission or operating limits during the reporting period, and there were no periods during which the continuous monitoring system was out of control during the reporting period.</p>

Name:

Steve Wess

Date:

9/29/15

Supervisor:

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