

B2132

M.W.G.

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

B213240738

FACILITY: WYANDOTTE DEPT MUNI POWER PLANT		SRN / ID: B2132
LOCATION: 2555 VAN ALSTYNE, WYANDOTTE		DISTRICT: Detroit
CITY: WYANDOTTE		COUNTY: WAYNE
CONTACT: Kim Kemper , Environmental Coordinator		ACTIVITY DATE: 07/13/2017
STAFF: Stephen Weis	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Compliance inspection of the City of Wyandotte Department of Municipal Services Power Plant. The Power Plant facility is scheduled for inspection in FY 2017.		
RESOLVED COMPLAINTS:		

Location:

Wyandotte Department of Municipal Services
Power Plant (SRN B2132)
2555 Van Alstyne
Wyandotte

Date of Activity:

Thursday, July 13, 2017

Personnel Present:

Steve Weis, DEQ-AQD Detroit Office
Kim Agee, Environmental Coordinator, Wyandotte
Charlene Hudson, Power Systems Supervising Engineer, Wyandotte
Chris Brohl, Plant Superintendent, Wyandotte
Kim Alfonsi, Barr Engineering Company

Purpose of Activity

A self-initiated inspection of the City of Wyandotte Department of Municipal Services ("WMS") Power Plant facility (hereinafter "WMS", "Wyandotte" or "power plant") was conducted on Thursday, July 13, 2017. The Wyandotte facility was on my list of sources targeted for an inspection during FY 2017. The purpose of this inspection was to determine compliance of operations at the Wyandotte facility with applicable rules, regulations and standards as promulgated by Public Act 451 of 1994 (NREPA, Part 55 Air Pollution Control), and Federal standards. The facility is also subject to the terms and conditions of Renewable Operating Permit (ROP) No. MI-ROP-B2132-2010 and DEQ-AQD Permit to Install No. 2-16.

Facility Description

The WMS is a municipal entity, owned and operated by the City of Wyandotte, that provides electricity, water, telephone, internet and cable television services to the residents of and businesses in Wyandotte. The electricity is generated by the City of Wyandotte's Municipal Power Plant. The power plant is located on the western shore of the Detroit River, just north and east of the downtown area of Wyandotte. The facility is bounded by the Detroit River to the east; to the north by Henry Ford Wyandotte Hospital, a small marina and some residences along the marina; to the south by Bishop Park; and to the west and southwest by an area that is primarily a mix of residential types of properties (houses, condominiums, a senior apartment complex) as well as one of the City of Wyandotte's libraries.

The power plant currently has two natural gas-fired utility boilers operating on site, identified as Unit 5 and Unit 7. The boilers are used to power turbines to generate electricity for WMS's electrical customers, and to generate and provide steam to meet the steam needs of contract customers. Unit 7 used to fire coal, but it was converted to burn only natural gas in the first quarter of 2012. Another boiler used to operate at the facility, Unit 8. Unit 8 was a fluidized bed boiler that was capable of firing coal, untreated virgin wood chip waste and tire-derived fuel (TDF). All of the boilers operate in buildings in the northern part of the power plant property. The southern

portion of the power plant property was formerly used to store the solid fuels that were fired in boiler Units 7 and 8. This area, which is roughly two acres in size, used to contain coal piles, an area to store tire-derived fuel (TDF) and wood, and an area close to the river that was used to store limestone. With the removal of Unit 8 from service and the conversion of Unit 7 from burning solid fuels to natural gas, the fuel and limestone that was stored on site was removed, and the area that was formerly used to store the solid fuels and limestone is now an open area.

In addition to the power plant property, Wyandotte operates three diesel-fired compression ignition engine generators that provide back-up power to the power plant. These generators are located approximately ½ mile north of the power plant on James DeSana Drive. The parcel of property on which the generators are located lies to the north of the Henry Ford Wyandotte Hospital, and it borders the southern portion of the BASF complex property.

Facility Operations

The Wyandotte facility, as a municipal utility, operates 24 hours per day, 7 days per week, and every day of the year. According to the facility's 2016 MAERS report, there are 20 employees at the power plant.

As previously mentioned, the power plant currently consists of two boilers. Unit 5 is a 22.5 MW steam and electric generator that uses exclusively natural gas as a fuel, and has a maximum rated heat input capacity of 260 MMBTU/hour. Unit 7 is a 32.5 MW steam and electric generator with a maximum rated heat input capacity of 467.3 MMBTU/hour that is currently capable of firing only natural gas. Unit 7 is equipped with low NOx burners and separated over-fire air.

As mentioned in the last section of this report, the Unit 8 boiler is no longer in operation, having been permanently retired as of June 30, 2016. Units 7 and 8 both used to fire solid fuels (coal in Units 7 and 8, as well as tire-derived fuel (TDF) and clean wood in Unit 8), and the solid fuels were stored in piles that took up the southern half of the power plant property. I was told during the site visit that WMS sold the remaining coal to Lafarge, and was able to dispose of the remaining TDF via landfilling. The fuel and materials storage and handling area is now emptied of material, and is an open area.

The combustion of solid fuels also resulted in the generation of fly ash that needed to be managed and disposed of by the facility. Units 7 and 8 each had a fly ash collection system that received ash from each boiler's respective particulate emissions control system (Unit 7 was equipped with an electrostatic precipitator, and Unit 8 was equipped with a baghouse). The fly ash collectate from the Unit 7 and 8 particulate control devices was pneumatically conveyed to fly ash silos, from which the fly ash was loaded into trucks for offsite disposal. The fly ash silo and transfer system for Unit 7 is located directly south of and adjacent to the Unit 7 boiler building along the facility's main driveway from Van Alstyne to the former fuel and material storage area, while the fly ash silo and transfer system for Unit 8 is located at the northwest corner of the facility, directly north of the boiler. These ash disposal systems are no longer in operation with the permanent retirement of Unit 8 and the conversion of Unit 7 to firing exclusively natural gas.

The three engine generators that are owned and operated by WMS and located to the north of the power plant are each 1,825 kW standby compression ignition diesel-fired engine generators. Emissions from each of the engines are controlled by a catalytic oxidation emission control system.

In the time since my last inspection of the facility on September 14, 2015, WMS was planning some changes to the power plant. These changes were presented to DEQ-AQD as part of a Permit to Install application, which was reviewed and approved by AQD's Permit Unit, and resulted in the issuance of Permit to Install No. 202-14 on July 21, 2015. The changes that were addressed by this permit included the proposed installation of two new natural gas-fired boilers, to be referred to as Units 9 and 10; the installation of a 20 MW natural gas-fired combustion turbine paired with a heat recovery steam generator; and, upon the installation of the new equipment, the permanent shut down of Unit 8. As previously mentioned, Unit 8 was permanently retired, but WMS decided to not pursue the other aspects of the project. In correspondence to DEQ-AQD's Permit Unit dated October 6, 2016, WMS requested that Permit to Install No. 202-14 be voided. Per this correspondence, WMS stated that Unit 8 has been permanently retired as of June 30, 2016, and that the remaining emission units in the permit – the two boilers that were to have been referred to as Units 9 and 10, and the combustion turbine – will not be constructed at the facility. A copy of this correspondence is attached to this report for reference.

Inspection Narrative

I arrived at the Wyandotte power plant at 10:15am. I checked in at the security gate, and I was met by Kim Agee, WMS's Environmental Coordinator. Kim and I walked through the Unit 8 building and on to her office. There I was met by Charlene Hudson, Power Systems Supervising Engineer; Chris Brohl, Plant Superintendent, Wyandotte; and Kim Alfonsi of Barr Engineering Company, who provides environmental compliance consulting services for WMS.

We proceeded to discuss the compliance status of the Wyandotte facility. We first discussed the current operations at the facility. WMS staff described the removal of the material from the storage area. The storage and material handling operations, as well as the fly ash handling operations, were sources of fugitive dust, and were, accordingly, subject to fugitive dust management requirements. These requirements include the provisions of Consent Order SIP No. 34-1993, which is not an enforcement document, but rather a fugitive dust plan that was entered as an Order as part of the State of Michigan's State Implementation Plan (SIP) for PM-10 attainment. I was told that Teresa Kinder of Barr Engineering had spoken with staff from DEQ-AQD's SIP Unit regarding the Order, and the procedure for revising and/or rescinding the Order to reflect the removal of most of the sources of fugitive dust from the Wyandotte facility. We discussed the procedure for submitting a request to revise the Order. In the time since my site visit, WMS submitted two pieces of correspondence dated August 8, 2017 relating to the fugitive dust SIP Order – a letter to my attention that contains a request that the fugitive dust control plan under SIP No. 34-1993 be revised, and a letter to Breanna Bukowski of AQD's SIP Unit through which WMS requests that Consent Order SIP No. 34-1993 be rescinded.

We then proceeded to discuss the compliance status of the power plant with the terms and conditions of the ROP, and Permit to Install 2-16. At the time of my site visit, the renewal ROP for the facility had been drafted, and the 30 day public comment period had commenced on July 10. The draft ROP, while not yet effective, represents the current operations at the facility, and incorporates the terms and conditions from Permit No. 2-16 that will be effective going forward, so we also discussed the draft ROP as part of our compliance discussion. During the course of our discussion, we reviewed records (both paper and electronic), and we looked at some operations data for the boilers.

I left the facility at just after 12:00pm.

Permits/Orders/Regulations

Permits

The primary sources for the regulatory air requirements that are currently applicable to the Wyandotte facility are the facility's current Renewable Operating Permit No. **MI-ROP-B2132-2010**, which was effective on April 15, 2010, and **Permit to Install (PTI) No. 2-16**, which was issued via correspondence from DEQ-AQD to WMS dated July 21, 2015. A ROP renewal application was submitted to DEQ-AQD in September 2015. In the time since the ROP renewal application was received, WMS applied for and received PTI No. 202-14, but, as described earlier in this report, WMS decided to not install the equipment that was addressed by this PTI. They requested that the PTI be voided, and DEQ-AQD voided the permit on October 19, 2016. PTI No. 2-16 was also reviewed and issued in the time since the ROP renewal application was submitted. An updated ROP application was submitted to DEQ-AQD on November 17, 2016.

1) ROP No. MI-ROP-B2132-2010

The public comment period for the ROP renewal commenced on July 10, 2017. As of the writing of this report, the ROP renewal is beginning its 45 day EPA review period. During the site visit, I discussed the terms and conditions in the current ROP, as well as some of the requirements that will be in the ROP renewal when it is issued.

The following paragraphs provide a summary of the compliance of the operations at the Wyandotte power plant with the terms and conditions put forth by the ROP (No. MI-ROP-B2132-2010), with the headings representing the sections of the ROP. EUUNIT7BLR will not be included in the ROP compliance discussion as Unit 7 is currently subject to the terms and conditions of PTI No. 2-16, which will be discussed in this report after the discussion regarding the ROP.

EUUNIT5BLR

This Emission Unit covers the requirements for boiler Unit 5. There are no emission limits associated with this Emission Unit in either the current ROP, or the proposed ROP, and there are no material limits in the current ROP.

III. Process/Operational Restrictions

Wyandotte is **in compliance** with the two Special Conditions (S.C.) in this section – the maximum heat input to Unit 5 does not exceed 260 MMBTU/hour (S.C. III.1), as this is a design limit for the boiler, and natural gas is the only fuel fired in this Unit (S.C. III.2). The limiting of Unit 5 to firing only natural gas is included in the proposed ROP renewal as a material limit.

VI. Monitoring/Recordkeeping

Wyandotte is **in compliance** with the requirements to monitor and record NO_x, CO and stack gas flow, and to calculate and record SO₂ emissions in accordance with 40 CFR Part 75. The facility appears to be up to date on the required Relative Accuracy Test Audits (RATAs) for the monitors on Unit 5. AQD's Technical Programs Unit (TPU) staff monitors this information. The next RATA for Unit 5 is currently scheduled for the week of October 16, 2017.

VII. Reporting

Wyandotte is **in compliance** - all required reports are submitted to DEQ-AQD. The proposed ROP renewal includes a SC that puts forth the reporting requirements associated with 40 CFR Part 63, Subpart DDDDD. The WMS facility's applicability to and compliance with Subpart DDDDD will be discussed later in this section.

IX. Other Requirements

The Special Conditions in this section put forth the requirements of the Federal Acid Rain program, and the CAIR programs (CAIR-SO₂ Trading program, CAIR-NO_x Annual Trading program, CAIR NO_x Ozone Trading program). Wyandotte demonstrates compliance with these programs to US EPA through the submittal of required reports (e.g. ECMPS). The proposed ROP renewal contains updated references for these programs – the Transport Rule NO_x Annual Trading Program (40 CFR Part 97, Subpart AAAAA), the Transport Rule NO_x Ozone Trading Program (40 CFR Part 97, Subpart EEEEE), and the Transport Rule SO₂ Group 1 Trading Program (40 CFR Part 97, Subpart CCCCC). The facility looks to be **in compliance** with these requirements.

EUUNIT7BLR

This Emission Unit puts forth the permit and regulatory requirements for boiler Unit 7. Recall that PTI No. 2-16 put forth updated requirements for Unit 7. Thus, the compliance status of Unit 7 will be discussed in the conversation for PTI No. 2-16.

EUUNIT8BLR

This Emission Unit puts forth the permit and regulatory requirements for boiler Unit 8. Recall that Unit 8 was permanently retired effective June 30, 2016. Therefore, the permit conditions and requirements associated with this Emission Unit are no longer applicable.

FGWMSSENGINES

This Flexible Group contains the regulatory requirements for the three standby compression ignition diesel fuel-fired engine generators.

I. Emission Limits

This Flexible Group puts forth an emission limit for NO_x, and a requirement that the CO emissions from the engines be reduced by at least 70%, which serves as a surrogate/equivalent emission limit to the formaldehyde limit found in 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). Wyandotte performs annual compliance emissions testing of the engines in accordance with Section V. of this Flexible Group.

The last compliance emissions testing was performed on the engines on October 5-6 and November 3,

2016. The test results showed **compliance** with the emission limits. NO_x was tested for Engine 3, and an emission rate of 23.91 lbs. of NO_x/hour was measured. This number is factored with the actual usage of the engines, in hours, to estimate NO_x emissions. Using this method, for the 2016 calendar year, approximately 1,224.28 lbs. of NO_x was estimated to have been emitted in the facility's 2016 MAERS report, which is in compliance with the limit in SC I.1. All three engines were tested for CO destruction efficiency. The measured CO destruction efficiencies, based on a three-run average, was 95.16% for Engine 1, 94.67% for Engine 2, and 95.07% for Engine 3. The measured CO destruction efficiencies are all well over 70%, in compliance with SC I.2. The test was conducted in accordance SC I.2(a). WMS monitored the catalyst inlet temperature and the pressure drop across the catalyst during the testing, in accordance with the requirements in SC I.2(b)-(d). This monitoring data is summarized in Appendix F (Source Operating Data) of the Compliance Emission Sampling Report, which was submitted to DEQ-AQD via correspondence dated December 1, 2016. A copy of this report can be found in the Wyandotte facility file. A copy of the cover letter from the test report is attached for reference.

II. Material Limits

Compliance. WMS monitors the sulfur content of the diesel fuel used in the engines. They use ultra-low sulfur diesel.

III. Process/Operational Restrictions

Special Conditions:

III.1 and 2 – **Compliance.** WMS has maintained a Preventative Maintenance Plan for FGWMSENGINES. A revised and modified plan was submitted to the AQD-Detroit Office on September 6, 2017.

III.3 – **Compliance.** The total break-in hours of the engines did not exceed 200 hours.

III.4 – The engines are **in compliance** with Subpart ZZZZ. The WMS submits semi-annual compliance reports, as required by Subpart ZZZZ. These reports have indicated that the engines are complying with the applicable requirements of Subpart ZZZZ.

IV. Design/Equipment Parameters

IV.1 – **Compliance.** WMS has contracted with the engine manufacturer (Caterpillar) to develop a preventative maintenance and parts replacement schedule. The engines are operated within the guidelines put forth in this permit condition (and, in turn, Subpart ZZZZ). The catalyst inlet temperature and the pressure drop across the catalyst are continuously monitored by WMS.

V. Testing/Sampling

The compliance emissions testing required in Special Conditions V.1 and V.2 has been conducted. The next scheduled compliance emissions testing for the engines is currently scheduled to take place on October 16 and 17, 2017.

VI. Monitoring/Recordkeeping

Special Conditions:

VI.1 and VI.2 – **Compliance.** WMS monitors the diesel fuel usage rate. During the site visit, I was shown some samples of the "Diesel Generator Operation Tracking Log" report, which monitors and records operating parameters for each engine every 10 minutes while it is running. WMS also continues to submit a monthly diesel fuel usage record for FGWMSENGINES with the annual MAERS (Michigan Air Emissions Reporting System) report for the Wyandotte facility.

VI.3 and VI.4 – **Compliance.** WMS has installed equipment to continuously monitor the catalyst inlet temperature and the pressure drop across the catalyst when the engines are operating.

VI.5 – **Compliance.** The required parameters are being monitored by WMS staff.

VI.6 – **Compliance.** The NO_x emission calculation records are being kept. They are provided as part of the annual MAERS report.

VI.7 – **Compliance.** WMS monitors the fuel sulfur content.

VI.8 – **Compliance.**

VII. Reporting

WMS is **in compliance** with the conditions in this section. All of the required records are completed and submitted. WMS includes the semi-annual report required by Subpart ZZZZ (SC VII.4) with their Annual/Semi-annual ROP Deviation reports.

IX. Other Requirements

IX.1 – **Compliance.** WMS monitors the sulfur content of the diesel fuel used in the engines to demonstrate compliance with the sulfur in fuel limit.

FGMATVENTS

This Flexible Group covers the emission units that relate to coal, fly ash and limestone handling at the facility, as well as the facility's roadways. This Flexible Group serves to address fugitive dust control at the Wyandotte facility. The Emission Units included in FGMATVENTS in the current ROP include EUCOALYARD, EUROADWAYSB, EEU7SILOVENT, EEU8SILOVENT, EUFUGLIMESTONE, EUASHLOAD7, EEU8LIMESTONE, AND EUASHLOAD8. The Emission Units relating to Unit 8 are no longer in use; this is also true of the Emission Units relating to ash handling and silos associated with Unit 7. In addition, SC IX.1 in PTI No. 2-16 states that EEU7SILOVENT and EUASHLOAD7 shall permanently cease operation upon the issuance of the PTI; it was issued on March 23, 2016. The proposed ROP renewal still has FGMATVENTS, and the Flexible Group covers the EUPLANTYARD and EUROADWAYSB Emission Units.

I. Emission Limits

There is a particulate matter emission limit for the limestone and fly ash handling systems (SC I.1). The method for determining compliance is to perform a certified Method 9 visible emission reading of each coal, limestone and ash handling system baghouse/filter exhaust point at least once per year, while the system is operating. The limestone and fly ash handling systems are no longer in operation at the facility, so this requirement is no longer applicable.

III. Process/Operational Restrictions

III.1 – The coal, limestone and ash handling systems are no longer in operation, so this requirement is no longer applicable.

V. Testing/Sampling

V.1 – WMS is no longer required to conduct the Method 9 readings specified in this SC, as the coal, limestone and ash handling systems that are the subject of the requirement are no longer in operation.

VI. Monitoring/Recordkeeping

VI.1 – The facility is no longer performing the weekly visible emission observation, as the subject visible emission points – the coal, limestone and ash handling system fabric filter exhaust points – are no longer in operation.

VI.2 – **Compliance.** WMS maintains records of the fugitive dust control measures at the facility. During the site visit, WMS showed me their fugitive dust records. WMS provided a document titled "Example Fugitive Dust Recordkeeping Form" as part of the August 8, 2017 request to revise the fugitive dust control plan under Consent Order SIP No. 34-1993. A copy of the form is attached to this report for reference.

VII. Reporting

Wyandotte is **in compliance** with the reporting requirements associated with FGMATVENTS.

IX. Other Requirements

The requirements in this section of the ROP relate to fugitive dust management, and they cite **Consent Order**

SIP No. 34-1993 as an applicable requirement, as well as Michigan's fugitive dust regulations (Section 5524 of Act 451 and Administrative Rules 371 and 372). The Consent Order is part of the State of Michigan's State Implementation Plan (SIP); this part of the SIP was submitted by the State of Michigan as part of the attainment demonstration for PM-10. The Michigan Department of Natural Resources submitted the PM-10 SIP to EPA on June 11, 1993, and, after a couple of revisions, the nonattainment area PM SIP for Wayne County, Michigan was approved and became effective on February 16, 1995. One element of the SIP was the requirement that facilities with designated standard industrial classifications that are located in the area designated in Table 36 of Michigan Administrative Rule 371 "...develop and implement an approved fugitive dust control operating program and to have the program embodied in a legally enforceable order..." (this quote was taken from the preamble to the Consent Order). Many of the larger facilities in the portion of Wayne County designated in Table 36 were issued Orders as part of the SIP. The Wyandotte power plant was issued the Consent Order referred to as SIP No. 34-1993.

Special Condition IX.1 references the requirements of the Consent Order, and the content of the Order is included as Appendix B to the ROP. As mentioned previously in this report, WMS has been looking to make some changes to the content of the Consent Order to accurately reflect current dust control measures at the facility, and also to account for the fact that most of the activities at the facility that were potential sources of fugitive emissions, including the material storage and handling operations, which were primarily associated with the use of solid fuel at the facility, no longer occurring at the facility. WMS has submitted requests to DEQ-AQD to revise the fugitive dust control plan for the facility, and to rescind Consent Order SIP No. 34-1993. DEQ-AQD will respond accordingly to these requests.

In my view, the facility is **in compliance** with the fugitive dust management requirements.

2) Permit to Install No. 2-16

This PTI was issued to put forth enforceable conditions relating to the removal of coal usage in Unit 7, and to permit the exclusive use of natural gas in Unit 7. The terms and conditions from this PTI that are applicable going forward have been incorporated into the draft ROP renewal. The discussion that follows details the compliance of WMS with the terms and conditions of PTI No. 2-16.

EUUNIT7BLR

This Emission Unit puts forth the permit and regulatory requirements for boiler Unit 7.

I. Emission Limits

Special Conditions I.1 puts forth the NO_x emission limit from 40 CFR Part 60, Subpart D (Standards of Performance for Fossil Fuel Fired Steam Generators) that is associated with a natural gas fired boiler unit. The NO_x emission limit of 0.2 lb/MMBTU input is effective per Subpart D, as well as per the requirements of a Consent Decree that was entered into between WMS and US EPA, Amended Consent Decree number 11-cv-12181).

WMS continuously monitors NO_x emissions using a CEMS. Based on recent quarterly excess emission reports, Unit 7 is **in compliance** with the limits for these pollutants.

II. Material Limits

The facility is **in compliance** with the material limits in this PTI. Unit 7 does not fire coal (SC II.1), and only natural gas is burned in Unit 7 (SC II.2)

III. Process/Operational Restrictions

SC III.1 – Compliance. WMS has had a Malfunction Abatement Plan and a Maintenance Procedures and Schedules Plan for the Unit 7 boiler. WMS submitted revisions to these plans to DEQ-AQD on September 6, 2017 to update the information to reflect that Unit 7 no longer burns coal, and fires exclusively natural gas. The plans address the updated control equipment associated with firing natural gas (low NO_x burners, separated over-fire air).

SC III.2 - **Compliance**. WMS stated that Unit 7 operates only if the low NO_x burners and separated over-fire air

are installed, maintained and continuously operated.

IV. Design/Equipment Parameter

SC IV.1 – Compliance. WMS operates and maintains continuous monitors on Unit 7 for NO_x and oxygen (or carbon dioxide) emissions.

V. Testing/Sampling

There are no Testing/Sampling requirements for Unit 7 in PTI No. 2-16.

VI. Monitoring/Recordkeeping

SC VI.1 – **Compliance**. Wyandotte continuously monitors and records the required information.

VII. Reporting

Wyandotte is **in compliance** with the applicable provisions of the reporting requirements in Special Conditions VII.1 – VII.2, which relate to excess emissions and monitoring system reports.

IX. Other Requirements

The only Special Condition in this section, SC IX.1, states that WMS shall comply with SCs IX.2 through IX.9 for EUUNIT&BLR in the current ROP, which is ROP No. MI-ROP-B2132-2010. These Special Conditions put forth the requirements of the Federal Acid Rain program, and the CAIR programs (CAIR-SO₂ Trading program, CAIR-NO_x Annual Trading program, CAIR NO_x Ozone Trading program). Wyandotte demonstrates compliance with these programs to US EPA through the submittal of required reports (e.g. ECMPS). The proposed ROP renewal contains updated references for these programs – the Transport Rule NO_x Annual Trading Program (40 CFR Part 97, Subpart AAAAA), the Transport Rule NO_x Ozone Trading Program (40 CFR Part 97, Subpart EEEEE), and the Transport Rule SO₂ Group 1 Trading Program (40 CFR Part 97, Subpart CCCCC). The facility looks to be **in compliance** with these requirements.

Consent Orders

The Wyandotte facility was subject to **Consent Order AQD No. 45-2014**, which had an effective date of September 9, 2014. WMS sent a request to the DEQ-AQD Chief dated September 9, 2016 in which they requested that this Consent Order be terminated. Per this request, WMS provided certification that the facility has fully complied with all of the requirements of the Order. Among the requirements of this Order is a requirement for WMS to apply for the renewal to ROP No. MI-ROP-B2132-2010 by October 15, 2014 (the application was submitted in September 2014), and to comply with the 0.2 lbs./MMBTU NO_x limit, when firing natural gas, as found in 40 CFR Part 60, Subpart D.

The Wyandotte facility is currently subject to a Consent Decree with US EPA, **Amended Consent Decree number 11-cv-12181**, that was entered on June 15, 2016. Some of the requirements of the Consent Decree are included in the draft ROP renewal.

Regulations

The WMS is subject to the requirements of some Federal regulations.

Unit 5 is subject to 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters). WMS requested and was granted an extension until January 31, 2017 by DEQ-AQD to comply with the provisions of this regulation. WMS submitted the required Notification of Compliance Status and Annual Compliance Report prior to the January 31 compliance deadline. The information that was provided by WMS in these submittals indicates that the facility is currently complying with the applicable requirements of Subpart DDDDD. Copies of these submittals can be found in the facility file.

Unit 7 is subject to 40 CFR Part 60, Subpart D ((Standards of Performance for Fossil Fuel Fired Steam Generators).

The three diesel-fired engine generators are subject to 40 CFR Part 63, Subpart ZZZZ (National Emission

Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).

Compliance Determination

Based upon the results of the July 13, 2017 site visit and subsequent records review, including reviews of information from the various reports that were submitted by WMS throughout the year, the Wyandotte Power Plant appears to be **in substantial compliance** with the terms and conditions of Renewable Operating Permit MI-ROP-B2132-2010, Permit to Install No. 2-16 and, in turn, applicable State and Federal regulations.

Attachments to this report: a copy of the correspondence from WMS requesting that PTI No. 202-14 be voided; a copy of the cover letter from the most recent compliance emissions test for the three engines in FGWMSENGINES; an example fugitive dust recordkeeping form; copies of planned maintenance checklists for the engines (including the small fire pump engine at the power plant); copies of the most recent Preventative Maintenance - Inspection and Preventative Maintenance Checklist for the three engines that was performed by Michigan GAT.

NAME Steph Wren

DATE 9/19/17

SUPERVISOR JK