

B2132
MANILA

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

B213267965

FACILITY: WYANDOTTE DEPT MUNI POWER PLANT		SRN / ID: B2132
LOCATION: 2555 VAN ALSTYNE, WYANDOTTE		DISTRICT: Detroit
CITY: WYANDOTTE		COUNTY: WAYNE
CONTACT: Chris Brohl, Plant Superintendent		ACTIVITY DATE: 06/27/2023
STAFF: Stephen Weis	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Compliance inspection of the Wyandotte Department of Municipal Services Power Plant facility in Wyandotte. The Wyandotte facility is scheduled for inspection in FY 2023.		
RESOLVED COMPLAINTS:		

Location:

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

Date of Activity:

Tuesday, June 27, 2023

Personnel Present:

Steve Weis, EGLE-AQD Detroit Office
Chris Brohl, Environmental Coordinator, Wyandotte
Alex Watzek, Barr Engineering Company
Liam Duffy, 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 Tuesday, June 27, 2023. The Wyandotte facility was on my list of sources targeted for an inspection during FY 2023. 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-B2132-2023, which became effective on March 13, 2023.

Facility Site 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 located in Wyandotte. The electricity is distributed 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 Bacon memorial District Library.

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. I was told during the site visit that there are 16 employees at the power plant. WMS's electrical system demand is 34 MW demand per day, of which the BASF facility requires 14 MW. The electrical demand is currently purchased for distribution to WMS customers.

The power plant currently has two natural gas-fired utility boilers on site, identified as Unit 5 and Unit 7. Unit 5 (identified in the facility's ROP as EUUNIT5BLR) is a 22.5 MW steam and electric generator that uses exclusively natural gas as a fuel, and the boiler has a maximum rated heat input capacity of 260 MMBTU/hour. Unit 7 (EUUNIT7BLR) 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. Units 5 and 7 are located and operate in buildings on the northern part of the power plant property. Unit 7 currently operates as a peaking unit, operating during periods of peak demand to provide power to the electric distribution grid. I was told during the site visit that Unit 7 was last operated during the RATA (relative accuracy test audit) that was performed on October 7, 2022. I was told that Unit 5 has had limited operations since its last RATA in 2021 (it last operated on September 28, 2022). and that WMS may retire the boiler.

Two natural gas-fired package boilers were installed at the facility in May of 2020. The two boilers each have a maximum rated heat input capacity of 48 MMBTU per hour. The boilers are identified by WMS as the North and South Package Boilers, and they are identified in the facility's ROP as EUPACKBOILER-N and EUPACKBOILER-S. The package boilers are located on the south side of the existing boiler buildings, near the Unit 7 and Unit 5 buildings. The package boilers are used to supply steam for the neighboring Henry Ford Wyandotte hospital, and WMS's power plant and water plant.

The three engine generators (identified in the ROP as EUWMSENGINE1, 2 and 3) 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.

The southern portion of the power plant property was formerly used to store the solid fuels that were fired in boiler Unit 7 and the former Unit 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. This is now an open area, and it is part of EUPLANTYARD and FGMATVENTS in the ROP.

Inspection Narrative

I arrived at the Wyandotte power plant at 9:55am. I checked in at the security gate, and I walked to Chris Brohl's office in the Unit 7 and Unit 8 building.

Chris told me that Unit 5 is scheduled for an inspection in August 2023 that will be performed by a company called Chubb. Chris said that WMS is considering retiring Unit 5. He explained that the

at 900 pounds (psi), but it was never operated over the 400-450 psi range. He said that Unit 7 was last operated on September 28, 2022. Chris told me that Unit 7 was inspected a few weeks ago. He said that the inspection covers everything from the top of the boiler to the fan floor, to the breaching, to the fuel feed. Chris said that Unit 7 was last operated during a RATA that was performed on October 7, 2022.

We further discussed the current operations at the facility. I was told that electricity is being purchased rather than generated on site for distribution to WMS's customers. The package boilers are being used to supply steam for the WMS's customers, which include the neighboring Henry Ford Wyandotte hospital, and WMS's power plant and water plant.

We discussed the Caterpillar engines located on James DeSana Drive. I was told that the engines are scheduled to be started the next day as part of the manufacturer-recommended monthly operation and maintenance schedule.

The group of us then proceeded to discuss the compliance status of the power plant with the terms and conditions of the ROP. During the course of our discussion, I went through the Emission Unit and Flexible Group tables in the ROP, and we discussed the facility's compliance with the various requirements in the permit conditions. We reviewed records (both paper and electronic), and I was provided with some records during the site visit, and the remainder were shared with me electronically later that week.

After discussing the ROP, Alex, Liam and myself walked to the building in which the package boilers are located, and looked at the boilers. We also looked at Unit 7, and I took a picture of the certificate that is posted on the unit in relation to the recent boiler inspection, which is attached to this report for reference.

After some discussion summarizing the site visit, I left the facility at around 11:15am.

Permits/Orders/Regulations

Permits

The primary source for the regulatory air requirements that are currently applicable to the Wyandotte facility is the facility's current Renewable Operating Permit No. MI-ROP-B2132-2023, which became effective on March 13, 2023.

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, with the headings representing the sections of the ROP.

EUUNIT5BLR

This Emission Unit covers the requirements for boiler Unit 5, a 260 MMBTU/hr, 900 psi natural gas fired boiler.

I. Material Limits

There are no emission limits associated with this Emission Unit in the ROP.

II. Material Limits

SC II.1 limits Unit 5 to firing only natural gas. The facility is in compliance with this requirement.

III. Process/Operational Restrictions

There are no process/operational restrictions in the ROP.

IV. Design/Operational Restrictions

Wyandotte is **in compliance** with the two Special Conditions (SC) in this section. In accordance with the requirements of SC IV.1, the maximum heat input to Unit 5 does not exceed 260 MMBTU/hour, as this is a design limit for the boiler. Devices to monitor NO_x, CO₂ and flow from the Unit 5 boiler are calibrated, maintained and operated properly, in compliance with SC IV.2.

V. Testing/Sampling

There are no testing and sampling requirements put forth for Unit 5 in the ROP.

VI. Monitoring/Recordkeeping

SC VI.1 requires that the permittee continuously monitor and record NO_x and CO₂ emissions and flow. WMS utilizes the CEMS when Unit 5 is in operation. As mentioned previously in this report, Unit 5 has experience limited use, and is in standby. I was told that the CEMS is on standby, and has had only one operating quarter recently. Compliance.

For SC VI.2, WMS keeps records of all measurements, and the continuous monitoring systems' performance evaluations, calibration checks, and records of adjustments and maintenance (SC VI.2).

For SC VI.3, SO₂ emissions are calculated and recorded. I was told that this is done using the Stack Vision program, and the information is reported to ECamps.

VII. Reporting

Wyandotte is in compliance with the requirements in this section, as all required reports are submitted to EGLE-AQD, including RATA requirements.

VIII. Stack/Vent Restrictions

The stack dimensions were not discussed during the site visit.

IX. Other Requirements

The Special Conditions in this section put forth the requirements of the Federal Acid Rain program, and the Cross-State Air Pollution Control Rule (CSAPR) programs. The CSAPR requirements that apply to Unit 5 are the NO_x Annual Trading Program (40 CFR Part 97, Subpart AAAAA), the Transport Rule NO_x Ozone Group 3 Trading Program (40 CFR Part 97, Subpart GGGGG), and the SO₂ Group 1 Trading Program (40 CFR Part 97, Subpart CCCCC). Wyandotte demonstrates compliance with these programs to US EPA through the submittal of required reports (e.g. quarterly ECMPS reporting). As mentioned, Unit 5 has had limited operation. I was told that the facility still maintains a balance of credits, but that they are not generating any more. 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. Unit 7 is a 467 MMBTU/hr, 900 psi natural gas fired boiler with low NO_x burners and separated over fire air.

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 0.20 lb/MMBTU input is effective per Subpart D.

WMS continuously monitors NO_x emissions from Unit 7 using a CEMS. Based on recent quarterly excess emission reports, Unit 7 is **in compliance** with the emission limit. As mentioned, Unit 7 has limited operation.

II. Material Limits

SC II.1 limits Unit 7 to firing only natural gas. The facility is in compliance with this requirement.

III. Process/Operational Restrictions

SC III.1 – WMS submitted revisions to the Malfunction Abatement Plan and a Maintenance Procedures and Schedules Plan to AQD in August of 2021 that meets the requirements of this condition.

SC III.2 - WMS stated that Unit 7 operates only if the low NO_x burners and separated over-fire air are installed, maintained and continuously operated. Compliance.

IV. Design/Equipment Parameter

SC IV.1 – The SC requires that WMS install, calibrate, maintain and operate devices to monitor and record NO_x emissions and oxygen or carbon dioxide emissions on a continuous basis. This requirement is being met when the unit is in operation.

V. Testing/Sampling

There are no Testing/Sampling requirements for Unit 7 in the ROP.

VI. Monitoring/Recordkeeping

SC VI.1 – WMS continuously monitors and records the required information (e.g. NO_x emissions, oxygen or carbon dioxide). Compliance.

SC VI.2 – The CEMS are operated to meet the requirements in Appendix A.

VII. Reporting

Wyandotte is **in compliance** with the applicable provisions of the reporting requirements in this section. SCs VII.2 and 3 address the ROP compliance reports, and SCs VII.4 and 5 address the requirement to submit quarterly excess emission and monitoring system performance reports. WMS is complying with these requirements. For SC VII.6, WMS submits test reports (including RATA reports) to AQD's Technical Programs Unit and the Detroit District Office.

VIII. Stack/Vent Restrictions

The stack dimensions were not discussed during the site visit.

IX. Other Requirements

The Special Conditions in this section put forth the requirements of the Federal Acid Rain program, and the Cross-State Air Pollution Control Rule (CSAPR) programs. The CSAPR requirements that apply to Unit 7 are the NO_x Annual Trading Program (40 CFR Part 97, Subpart AAAAA), the Transport Rule NO_x Ozone Group 3 Trading Program (40 CFR Part 97, Subpart GGGGG), and the SO₂ Group 1 Trading Program (40 CFR Part 97, Subpart CCCCC). Wyandotte demonstrates compliance

with these programs to US EPA through the submittal of required reports (e.g. quarterly ECMPS reporting). As mentioned, Unit 7 has had limited operation. I was told that the facility still maintains a balance of credits, but that they are not generating any more. The facility looks to be in **compliance** with these requirements.

FGPACKBOILERS

This Flexible Group addresses the two natural gas-fired package boilers identified in the ROP as EUPACKBOILER-N and EUPACKBOILER-S.

I. Emission Limits

There are no emission limits associated with this Flexible Group.

II. Material Limits

There are no material limits associated with this Flexible Group.

III. Process/Operational Restrictions

There are no process/operational restrictions associated with this Flexible Group.

IV. Design/Equipment Parameter

There are no design/equipment parameter requirements associated with this Flexible Group.

V. Testing/Sampling

There are no Testing/Sampling requirements for this Flexible Group.

VI. Monitoring/Recordkeeping

SC VI.1 requires that records be maintained from the fuel supplier that document that the gaseous fuel meeting of natural gas in Subpart Dc. I was provided with a records sheet titled "Natural Gas Gross Calorific Value (GCV) Recordkeeping", which provides monthly records of the GCV based on the BTU factor provided by the monthly Natural Gas Transport Invoice from DTE. Compliance. SC VI.2 requires that monthly records of the total amount of each steam generating unit fuel delivered to the facility each month. I was provided with the DTE Gas Company Meter Statement for May 2023 that provides the daily amount of natural gas delivered to the facility each day in May.

VII. Reporting

WMS is in **compliance** with the applicable provisions of the reporting requirements in this section. SCs VII.2 and 3 address the ROP compliance reports.

VIII. Stack/Vent Restrictions

There are no stack/vent restrictions associated with this Flexible Group.

IX. Other Requirements

SC IX.1 requires that the permittee comply with all of the provisions of 40 CFR Part 60 Subpart Dc, as they apply to FGPACKBOILERS. WMS appears to be in compliance with this requirement.

FGWMS ENGINES

This Flexible Group contains the regulatory requirements for the three compression ignition engine generators identified as EUWMSENGINE1, EUWMSENGINE2, and EUWMSENGINE3.

I. Emission Limits

This Flexible Group puts forth an emission limit for NO_x of 35.9 tpy on a 12 month rolling time period basis, and a requirement that the CO emissions from the engines be reduced by at least 70% (or meet an emission limit of 23 ppmvd at 15% O₂). Wyandotte performs periodic compliance emissions testing of the engines for NO_x and CO emissions in accordance with Section V. of this Flexible Group.

The last compliance emissions testing that was performed on the engines to measure NO_x emissions took place in September 2022. NO_x was tested for Engine 2, and a three-run average emission rate of 20.01 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. I was provided with a copy of a spreadsheet titled "NO_x Annual Emission Tracking Sheet for Diesel Generators 1-3", which summarizes monthly and 12 month rolling emissions for 2022 and 2023 (through May 2023), and it attached to this report for reference. The 12 month rolling time period NO_x emissions for May 2023 are recorded as 0.43 tons.

All three engines were last tested for CO destruction efficiency during testing that took place in September 2021. The measured CO destruction efficiencies, based on a three-run average, was 94.85% for Engine 1, 95.20% for Engine 2, and 95.15% for Engine 3. The measured CO destruction efficiencies are all well over 70%, in compliance with SC I.2.

II. Material Limits

SC II.1 requires that the sulfur content of the diesel fuel used in the engines not exceed 0.05 percent by weight on an annual average. WMS monitors the sulfur content of the diesel fuel used in the engines. Corrigan supplies fuel oil (ultra-low sulfur diesel, or ULSD) to the Wyandotte facility. Corrigan used to provide a certificate of analysis to WMS, but they no longer send this information as the source of their fuel (BP Whiting) stopped sending them the information. Oscar W Larsen is handling the fuel sampling, and WMS has purchase tickets showing that the fuel is ULSD, and the specification sheet shows the sulfur content of the fuel.

III. Process/Operational Restrictions

SC III.1 – WMS maintains a Preventative Maintenance Plan for FGWMS ENGINES. A revised and modified plan was included with WMS's ROP renewal application, with revision date of August 2021. Compliance.

SC III.2 – WMS stated that they operate the engines within the normal operating ranges specified by the manufacturer. I was told that WMS operates within operating ranges that have been established for temperature and pressure drop. Compliance.

SC III.3 – The condition requires that WMS maintain the catalytic oxidation systems for the engines. I received records for engine operation thus far in 2023 (up through May 31, 2023) that show the monitored temperatures and pressure drops when the engines operate.

IV. Design/Equipment Parameters

SC IV.1 – The engines are equipped with a system that continuously monitors the catalyst inlet temperature. Compliance.

SC IV.2 – The engines are equipped with devices that monitor and record the pressure drop across the catalyst as required by the SC.

V. Testing/Sampling

SC V.1 – The most recent compliance emissions test to demonstrate compliance with the catalytic system efficiency (CO removal) took place on September 20-21, 2021. As described in section “I. Emission Limits”, the test demonstrated compliance. The pressure drop and catalyst inlet temperature was monitored and recorded during the test, as required by this SC.

SC V.2 – Testing for CO and NOx emissions, as required in SCs V.1 and 2, was performed using approved EPA methods. AQD Technical Programs Unit (TPU) staff have reviewed and approved the test protocols for the compliance emissions tests performed on the engines. NOx testing was performed in September 2022.

SC V.3 – The most recent compliance emissions test to measure a NOx emission rate from one of the engines in the Flexible Group (engine 2) took place in September 2022.

The testing of the engines was performed in accordance with the EPA test methods specified in SC V.4. WMS has been notifying AQD of the time and places of performance tests, in compliance with SC V.5.

VI. Monitoring/Recordkeeping

SCs VI.1 and VI.2 – **Compliance.** WMS monitors the diesel fuel usage rate. During the site visit, I was shown a sample of the “Diesel Generator Operation Tracking Log” report, which monitors and records operating parameters for each engine every 10 minutes while it is running. A copy of the records for engine operation on May 31, 2023 is attached to this report for reference.

SC VI.3 – WMS maintains records of monthly NOx emissions calculations, the most recent of which are attached for reference.

SC VI.4 – The sulfur content of the fuel used in the engines is tracked by WMS. As mentioned previously, they are working with Oscar W Larsen to schedule a fuel analysis.

SC VI.5 – Compliance. The required calculations are being maintained by WMS staff.

SC VI.6 – WMS maintains catalyst inlet temperature and pressure drop records for each catalyst. The inlet temperature for the two inlets to each catalyst are recorded every 10 minutes that the engine operates. I received a copy of the records for the three engines for 2023 up through May 31, which are attached to this report for reference.

SC VI.7 – WMS maintains the CPMS for the engines in accordance with the requirements of this SC. An updated site-specific monitoring plan was submitted in August 2021 as part of the ROP renewal application. Compliance.

VII. Reporting

WMS is **in compliance** with the conditions in this section. All of the required records are completed and submitted.

VIII. Stack/Vent Restrictions

The stack dimensions were not discussed during the site visit. There have been no known changes to the stacks for the three engines.

IX. Other Requirements

Based on information presented and discussed, WMS appears to be in substantial compliance with the area source requirements of 40 CFR part 63 Subpart ZZZZ (SC IX.1), and 40 CFR Part 60 Subpart IIII (SC IX.2).

FGWMS ENGINES-NSPS III

This Flexible Group addresses the requirements of 40 CFR Part 60 Subpart IIII as they apply to the three Caterpillar engines – EUWMS ENGINE1, 2 and 3.

I. Emission Limits

SCs I.1-4 are the emission limits for NO_x, HC, CO and PM from Subpart IIII. The engines are certified engines and meet these requirements.

II. Material Limits

SC II.1 puts forth sulfur content and Cetane index requirements for the diesel fuel used in the engines. As described in the discussion for FGWMS ENGINES, the sulfur content of the fuel is monitored, and WMS has arranged to have fuel samples analyzed for sulfur content and Cetane index.

III. Process/Operational Restrictions

SC III.1 – the engines are certified engines, and WMS is following manufacturer specifications. SC III.2 is not applicable, as the engines are certified and I was told that the engines are not operated in a non-certified manner. Compliance.

IV. Design/Equipment Parameters

There are no design/equipment parameters associated with this Flexible Group.

V. Testing/Sampling

The requirements in Section V are not applicable at this time as the engines are installed, configured, operated and maintained according to manufacturer's emission-related written instructions.

VI. Monitoring/Recordkeeping

For SC VI.1, I was provided with a copy of the specification sheet for the engines that shows that they are EPA certified.

For SC VI.2, I was shown some of the manufacturer written instructions, and I was provided with some copies of maintenance activity summaries, which are attached for reference. Compliance.

SC VI.3 addresses the fuel supplier certification records or fuel sample test data. Corrigan provides fuel specification sheets, and WMS is working with Oscar W Larsen to have fuel samples tested.

For SC VI.4, WMS said that the diesel fuel is ULSD, and that the fuel supplier provides certification information to show that the fuel is ULSD.

VII. Reporting

WMS is **in compliance** with the conditions in this section. All of the required records are completed and submitted.

VIII. Stack/Vent Restrictions

There are no stack/vent restrictions associated with the Flexible Group.

IX. Other Requirements

Based on information presented and discussed, WMS appears to be in substantial compliance with the requirements of 40 CFR Part 60 Subpart IIII.

FGEMERGEN-WATERPMP

This Flexible Group addresses two existing reciprocating internal combustion engines (RICE) that are subject to the area source requirements of 40 CFR Part 63 Subpart ZZZZ – EUDSLGEN, a 175 kW diesel fired emergency engine generator, and EUSLPMP, a 166 hp diesel fired emergency water pump engine.

I. Emission Limits

There are no emission limits associated with this Flexible Group.

II. Material Limits

SC II.1 specifies the maximum sulfur content and minimum Cetane index of the diesel fuel used in these engines. As previously discussed in this report, the diesel fuel used at the facility is ULSD, and WMS maintains information about the fuel.

III. Process/Operational Restrictions

SC III.1 specifies the maintenance that must be performed on the engines. WMS told me that annual maintenance is performed on these engines by Cummins. I was provided with a maintenance report provided by Cummins that summarizes maintenance activities from August 2022, which is attached to this report for reference.

For SC III.2, WMS stated that change the oil on the engines rather than utilizing an oil analysis program.

For SC III.3, WMS showed me a manufacturer's maintenance plan for the engines.

For SCs III.4-6, which address operating hours of the engines, WMS operates these engines about half an hour each month for readiness testing.

IV. Design/Equipment Parameters

SC IV.1 – The engines are equipped non-resettable hour meters.

V. Testing/Sampling

SC V.1 does not apply to the engines at this time, as WMS is not utilizing an oil analysis program.

VI. Monitoring/Recordkeeping

For SC VI.1, notification of compliance status is included with semi-annual reports. Also, there have been no malfunctions to report.

For SCs VI.2 and 3, WMS maintains maintenance records for the engines.

For SC VI.4, WMS tracks the usage of the engines. There is a meter on the engines, and a written log is kept.

For SCs VI.5 and 6, WMS works with their fuel supplier and a contract company to track the required information about the fuel used in the engines.

WMS appears to be keeping records in accordance with SCs VI.7 and 8.

VII. Reporting

WMS is **in compliance** with the conditions in this section. All of the required records are completed and submitted.

VIII. Stack/Vent Restrictions

There are no stack/vent restrictions associated with the Flexible Group.

IX. Other Requirements

Based on information presented and discussed, WMS appears to be in substantial compliance with the area source requirements of 40 CFR part 63 Subpart ZZZZ.

FGMATVENTS

This Flexible Group covers the plant grounds, including the plant yard (EUPLANTYARD) and the roadways (EUROADWAYB) at the power plant facility. The requirements in this Flexible Group address fugitive dust control at the Wyandotte facility.

I. Emission Limits

There are no emission limits associated with this Flexible Group.

II. Material Limits

There are no material limits associated with this Flexible Group.

III. Process/Operational Restrictions

SC III.1 addresses compliance with the fugitive dust requirements for the facility, including the site-specific SIP Order (No. 34-1993). The facility maintains required records to demonstrate compliance with the fugitive dust requirements.

IV. Design/Equipment Parameters

There are no design/equipment parameters associated with this Flexible Group.

V. Testing/Sampling

There are no testing/sampling requirements associated with this Flexible Group.

VI. Monitoring/Recordkeeping

VI.1 – **Compliance**. WMS maintains records of the fugitive dust control measures at the facility. I was told that there have not been any dust suppressant applications in 2023 up to the date of the site visit.

VII. Reporting

WMS is **in compliance** with the reporting requirements associated with FGMATVENTS. Regarding SC VII.4, I was told that there have been no instances in which an emission limit, operational requirement or recordkeeping requirement specified in the facility's fugitive dust plan has not been met.

VIII. Stack/Vent Restrictions

There are no stacks/vents associated with this Flexible Group.

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).

For background, 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.

SC IX.1 references that WMS shall fully comply with the requirements of the Consent Order; SC IX.2 presents the process change and control program revision provisions from the Consent Order; SC IX.3 presents the requirement in the Consent Order that WMS shall notify EPA of any approved changes to the requirements of the Order; and SC IX.4 provides that any requirements for which the Consent Order is the only identified underlying applicable requirement will be null and void if the Order is terminated.

Most of the activities at the power plant 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, have been permanently removed from the facility. There are still some unpaved areas on the facility grounds. WMS inspects these areas and initiates measure to control potential fugitive dust as necessary. I was provided with some fugitive dust logs for a few weeks prior to my site visit, which are attached to this report for reference.

The WMS facility looks to be in substantial compliance with the applicable fugitive dust management requirements. Most of the potential sources of fugitive dust that are identified in the Order have been permanently removed from the facility.

FG-COLDCLEANER

I was told that the status of the facility's one remaining cold cleaner has not changed. The cold cleaner uses a citrus-based cleaner called Orange Peel, and its contents/ingredients meet the material limit requirements of SC II.1. I was told that the unit is seldom used, and that the lid is closed when the unit is not in use. The remaining conditions in the Flexible Group were not discussed in further detail during this site visit. I received a SDS for the Orange Peel material, which is attached for reference.

Regulations

Some operations at the WMS are subject to the requirements of some Federal regulations. The facility is currently classified as a major source per 40 CFR Part 70 as the potential emissions of some criteria pollutants (NOx, CO) are above major source thresholds. The facility is currently classified as a minor, or area source of HAP emissions.

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

The two package boilers (FGPACKBOILERS) are subject to 40 CFR Part 60 Subpart Dc.

The three diesel-fired engine generators (FGWMSGENS) are subject to 40 CFR Part 60 Subpart IIII. In addition, FGWMSGENS and the two diesel-fired engines in the FGEMERGEN-WATERPMP Flexible Group are subject to the area source requirements of 40 CFR Part 63 Subpart ZZZZ.

Compliance Determination

Based upon the results of the June 27, 2023 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-B2132-2023 and, in turn, applicable State and Federal regulations.

NAME

Steve Wes

DATE

12/11/23

SUPERVISOR

JK