# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

	_
B23574371	~
DZ3374371	O

FACILITY: Holland BPW, Generating Station & WWTP		SRN / ID: B2357	
LOCATION: 64 Pine Ave, HOLLAND		DISTRICT: Grand Rapids	
CITY: HOLLAND		COUNTY: OTTAWA	
CONTACT: Judy N. Visscher , Environmental Specialist		ACTIVITY DATE: 03/15/2018	
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR	
SUBJECT: The purpose of this inspection was to evaluate the emission units that were still operational at the facility, and to determine compliance with MI-ROP-B2357-2014a.			
RESOLVED COMPLAINTS:			

On Thursday March 15, 2018 Air Quality Division (AQD) Staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of Holland Board of Public Works, James De Young Generating Station and Waste Water Treatment Plant located at 64 Pine Avenue, Holland Michigan. The purpose of this inspection was to evaluate the emission units that were still operational at the facility, and to determine compliance with MI-ROP-B2357-2014a. This inspection was done in conjunction with the inspection of Holland Board of Public Works — Holland Energy Park. KD met with Ms. Judy Visscher, Environmental Regulatory Specialist, who accompanied KD on the tour of the facility. KD also met with Mr. Bill Grysen, Waste Water Operation and Maintenance Supervisor, Mr. Theodore VanAken, Waste Water Treatment Plant Superintendent. Mr. VanAken and Mr. Grysen only accompanied KD on the tour of the Waste Water Treatment portion of the tour.

# **Facility Description**

The facility consists of a municipal utility electric generating station with an adjacent waste water treatment plant. The electric generating station had historically been coal fired, but switched to natural gas, prior to the complete retirement of three (3) remaining steam generating units. The waste water treatment plant, other wise known as the Water Reclamation Facility (WRF) is still operational.

Currently, all of the emission units located at the electric generating portion of the facility have been retired and are no longer operational. Specific retirement dates will be outlined in the compliance evaluation portion of this report (see below).

# Regulatory Analysis

The facility is currently subject to the Title V program and operates under MI-ROP-B2357-2014a and is also subject to several federal regulations. This source is a Major source of Hazardous Air Pollutants (HAP's), Nitrogen Oxides (NOx), Particulate Matter (PM), and Sulfur dioxides (SOx).

Formerly, Units 3, 4, and 5 were subject to 40 CFR part 63 Subpart UUUUU, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coal and Oil Fired Electric Generating Utility Steam Generating Units, or the Mercury and Air Toxics (MATS) regulation. These units were also subject to 40 CFR Part 64 for compliance assurance monitoring (CAM). Since these three (3) units have been retired, the applicability of these regulations has changed, and they are no longer subject to the requirements. Compliance with these regulations will not be further evaluated. However, it is important to note that the facility is still submitting the required deviation reports stating they have not been operating their continuous emission monitoring systems (CEMS) due to retirement. Additionally, since the retirement of the electric generating units, the Acid Rain Permit that was associated with this ROP has also been voided.

Emission units at the site also have Boiler MACT (40 CFR Part 63 Subpart DDDDD) and RICE MACT (40 CFR Part 63 Subpart ZZZZ) applicability. Details of this regulation will be outlined in the compliance evaluation portion of this report.

The facility also must comply with the source-wide requirements of the Asbestos NESHAP, 40 CFR Part 61, Subpart M.

KD spoke with Ms. Visscher, Mr. Grysen, and Mr. VanAken regarding the requirement of maintaining the Renewable Operating Permit, since the retirement of most of the emission units associated with this facility and due to the United States Environmental Protection Agency's (USEPA's) recent "Once in – Always In" Policy change. KD explained that AQD does not yet have official guidance on how a company should proceed if this

policy change affects their facility.

# **Compliance Evaluation**

The facility has source-wide Asbestos NESHAP requirements, which require shipment records for all asbestos containing materials that are transported off site, and for notification of any demolition that is to occur. KD did not notice any active demolition, or any evidence of recent demolition.

#### EU-FLYASH-SILO

Historically, this emission unit was for an 80 foot flyash silo with an associated baghouse for particulate control. This emission unit was dismantled in April 2016. No coal has been in use at the facility in more than two (2) years. There is also no coal left on the site. The baghouse that had been associated with this emission unit is no longer on site, therefore no associated pressure drop recordkeeping was available since the dismantling of the emission unit.

## EU-UNIT3, EU-UNIT4, and EU-UNIT5

Unit 3, which is a 11.5 MW Riley-Stoker RP Wall-Fired Coal fired boiler with an electrostatic precipitator (ESP) for control, was retired on June 1, 2016. Unit 4, which is a 22 MW Riley Stoker r4-2 wall-fired, dry bottom, coal and natural gas boiler with an ESP and a cyclone separator for control, and Unit 5, which was a 29 MW wall-fired, dry bottom coal and natural gas fired boiler with an ESP and Low-NOx burners, were retired on June 1, 2017. Prior to June 1, 2017, Units 4 and 5 were burning natural gas, rather than coal.

The most recent stack testing done on the units was conducted in 2015, and all indicated compliance with the various PM emission limits that the three (3) units have. When Units 4 and 5 switched over to natural gas only, the units had to comply with the provisions of the Boiler MACT, which is detailed in FG-BOILERMACT.

#### **EU-LIME-BIN**

The lime bin with associated fabric filter control, formerly located at the WRF, was completely removed in May 2015. KD was able to observe the former location of the bin at the WRF to confirm that it is no longer on site. The facility still uses a lime slurry, but no longer stores it using the bin. This emission unit will not be further evaluated.

#### EU-ODOR-SCRUBBER

This emission unit is an oxidizing wet scrubber that controls odors from the WRF. Sodium Hydroxide is used to maintain the pH of the scrubbing solution, while sodium hypochlorite is added to remove odors from the exhaust gas. Per Mr. VanAken, the scrubber continuously operates, unless maintenance is being done on the unit. At the time of the inspection, the pH was 10.1, with a liquid flow of 426 gallons per minute (GPM). Per the attached records, the pH is consistently between 9.6 – 10.4. In addition to recording the pH of the scrubber on a daily basis, the WRF staff is also recording the liquid flow and any observations of opacity.

KD was able to observe the unit from the rooftop, and a visual inspection of the scrubber did not show any issues with operation. The stack height, while not explicitly measured, appeared to be correct.

#### **EU-GENERAC**

This emission unit has been removed from the site and will not be further evaluated.

# **EU-CIENGINE**

This emission unit is a Certified 1,072 horsepower (2.73 mmBTU) ultra low sulfur diesel fired emergency generator. This unit is subject to the provisions of 40 CFR Part 60 Subpart IIII the new source performance standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 63 Subpart ZZZZ the NESHAP for Stationary Reciprocating Internal Combustion Engines. This unit complies with the provisions of ZZZZ via IIII. This unit is equipped with a non-resettable hour meter and at the time of the inspection had operated a total of 65.1 hours. Per Mr. VanAken, this unit is only run for routine maintenance. They have not needed to run it for emergency purposes. The Certification of this engine ensures compliance with the emission limitations for PM, CO, and NMHC+NOx, which are 0.15 g/hp-hr, 2.6 g/hp-hr, and 4.8 g/hp-hr,

respectively. Fuel records indicated compliance with the 15 ppm sulfur content limit.

#### FG-COLD-CLEANERS

There are two (2) cold cleaners located at the facility; one at the James De Young portion of the facility and one at the WRF portion of the facility. Ms. Visscher, stated that the one located at the generation station was emptied on March 8, 2018; KD confirmed that it was indeed empty during the visit. Mr. VanAken mentioned that they are thinking of switching the parts washer at the WRF to an aqueous based washer but have not done so as of yet.

## FG-CAM

EU-UNIT 3, EU-UNIT4, and EU-UNIT 5 are associated with this flexible group. These three (3) units are retired and have not operated since June 2016 (EU-UNIT3) and June 2017 (EU-UNIT4 and EU-UNIT5). The units had PM limits that they showed compliance with through stack testing, up until they were retired. The most recent stack testing done to show compliance with the PM limits was done in 2015. The facility is properly reporting for CAM, since no recordkeeping is being done since the units are not operational. This flexible group will not be further evaluated.

#### FG-BOILERMACT

Units 3 and 4, were also subject to the provisions of the Boiler MACT, 40 CFR Part 63 Subpart DDDDD. On June 7, 2017 a notification of change of applicability was received by AQD stating that these boilers have ceased all operation.

#### FG-EXISTINGGAS1-WWTP

The existing ROP currently lists three (3) boilers and several process heaters, it was determined that only UE-WWTP-Boiler2 and EU-WWTP-Boiler3a are subject to the requirements of 40 CFR Part 63 Subpart DDDDD, or the Boiler MACT. The reason that the (hot water) heaters are not subject, is because they are all exempt from the rules due to their small size of less than 1.6 MMBTU/Hr. The two (2) remaining boilers, as previously mentioned, are the only two (2) that are large enough to be subject to this regulation. These two (2) units are natural gas fired boilers, and proper initial notification has been received. These boilers require tune-ups once every five (5) years. Both boilers most recently had tune-ups in October 2015, which also coincided with their initial energy assessment. Records of the tune-ups are attached. The facility is also properly submitting the required semi-annual compliance reports.

# **Compliance Determination**

Based on the observations made during the inspection and a subsequent review of the records it appears as if Holland Board of Public Works James De Young Generating Station and Waste Water Treatment Plant is compliant with MI-ROP-B2357-2014a.

NAME

DATE 8/20/2018

SUPERVISOR