

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

B235766576

<b>FACILITY:</b> Holland BPW, Generating Station & WWTP		<b>SRN / ID:</b> B2357
<b>LOCATION:</b> 64 Pine Ave, HOLLAND		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> HOLLAND		<b>COUNTY:</b> OTTAWA
<b>CONTACT:</b> Trista Gregorski , Safety and Regulatory Compliance Manager		<b>ACTIVITY DATE:</b> 02/02/2023
<b>STAFF:</b> Kaitlyn DeVries	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b>		
<b>RESOLVED COMPLAINTS:</b>		

On Thursday February 2, 2023, Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff Kaitlyn DeVries (KD) and Hillary Hansen (HH) conducted an inspection of the Holland Board of Public Works Wastewater Treatment Plant located at 64 Pine Street, Holland Michigan. The purpose of this inspection was to determine compliance with applicable air quality rules and regulations.

KD and HH met Ms. Trista Gregorski, Safety & Regulatory Compliance Manager for Holland Board of Public Work and went to this location following an inspection at the Holland Energy Park. Once staff was on site, Mr. Theodore Van Akken, Plant Superintendent, joined staff on a walkthrough of the facility.

### Facility Description

The facility formerly consisted of the wastewater treatment plant and an adjacent municipal utility electric generating station, the James DeYoung Generating Station and had an associated Title V permit. Upon shutdown of the power plant, the ROP was voided in October 2018, and now the facility relies on Rule 201 permit exemptions for the processes located on site.

### Regulatory Analysis

As previously mentioned, the Holland Board of Public Works Wastewater Treatment Plant relies on Rule 201 permitting exemptions. The facility is, however, subject to the provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart ZZZZ for Stationary Internal Combustion Engines as an area source, and to the New Source Performance Standards promulgated under 40 CFR Part 60 Subpart JJJJ for Stationary Spark Ignition Internal Combustion Engines.

### Compliance Evaluation

The inspection started by discussing the current installation of the anaerobic biodigester and other ancillary equipment associated with the project. HBPW had previously submitted an exemption determination for the project. AQD staff was able to see that the metal tank for the digester was installed, insulated, and filled for hydrotesting.

There are two (2) boilers, in the vicinity of the digesters. One burns natural gas, while the other is a dual fuel boiler with the capability of combusting both natural gas and biogas. These boilers are rated at 8 MMBTU, each. Rule 201 permit exemption Rule 282(2)(b)(i) was claimed in the permit exemption demonstration for the natural gas boiler. Rule 201 permit exemption Rule 291 was claimed for the dual fuel boiler. In that demonstration, a 7.5 MMBTU boiler was evaluated, and the boiler installed is an 8 MMBTU boiler. However, even in if the 7.5 MMBTU boiler calculations were doubled, they would be below the Rule 291 de-minimis emissions specified in Rule 291. These boilers were operating at the time of the inspection.

The combined heat and power unit (CHP) associated with this project was not yet on site. The CHP, when installed, will be subject to the provisions of 40 CFR Part 60 Subpart JJJJ and to 40 CFR Part 63 Subpart ZZZZ, and performance testing will likely be required every year.

If the gas is not combusted in the CHP, it can go to an enclosed flare. The flare was not in operation at the time of the inspection. HBPW is claiming Rule 201 permit exemption Rule 291 with an exemption determination indicating emissions less than that allowed under Rule 201. However, with this demonstration, HBPW is estimating an untreated H<sub>2</sub>S concentration of 150 ppm. The emissions demonstration will need to be verified when the actual concentration of biogas becomes available.

Elsewhere on site are three (3) natural gas fired boilers rated at 808,000 BTU/hr., 2,600,000 BTU/hr., and 1,674,000 BTU/hr. When this site was operating under the Title V permit, these boilers were subject to 40 CFR Part 6 Subpart DDDDD, the Boiler MACT. However, upon recession of EPA's "Once in always in" policy and subsequent voiding of the ROP these boilers are no longer subject to those provisions. These boilers are exempt from Rule 201 permitting via Rule 282(2)(b)(i).

There is also a Certified 2.73 MMBTU diesel generator that is subject to the provisions of 40 CFR Part 62 Subpart ZZZZ and to the provisions of 40 CFR Part 60 Subpart IIII. Compliance with Subpart ZZZZ is demonstrated through compliance with Subpart IIII. The Certification of this engine ensures compliance with the emission limitations for PM, CO, and NMHC+NO<sub>x</sub>, which are 0.15 g/hp-hr., 2.6 g/hp-hr., and 4.8 g/hp-hr., respectively. This engine is equipped with a non-resettable hour meter and operates for less than 100 hours per year and only operates for readiness testing.

Lastly, there is an oxidizing wet scrubber that controls odors from the treatment of the wastewater. Sodium hydroxide is used to maintain the pH of the scrubbing solution, while sodium hypochlorite is added to remove odors from the exhaust gas. This unit operates continuously except for when maintenance is being conducted. This emission unit is exempt from rule 201 permitting under Rule 285(2)(m).

### Compliance Determination

Based on the observations made during the inspection it appears that Holland Board of Public Works Wastewater Treatment Plant is compliant with the applicable air quality rules and regulations.

NAME Kaitlyn Dehn DATE 3/9/2023 SUPERVISOR HH