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

G662066512

FACILITY: JOHNSTON BOILER CO		**SRN / ID:** G6620
LOCATION: 300 PINE, FERRYSBURG		**DISTRICT:** Grand Rapids
CITY: FERRYSBURG		**COUNTY:** OTTAWA
CONTACT: Christoper Wescott , Mechanical Engineer / Facilities Manager		**ACTIVITY DATE:** 03/02/2023
STAFF: Chris Robinson	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Complaint follow up and to determine the facilities compliance status with respect to applicable air quality rules and regulations.		
RESOLVED COMPLAINTS: C-23-00819		

A) INTRODUCTION

Johnston Boiler Company (SRN G6620), located at 300 Pine Street in Ferrysburg, Michigan was inspected on March 2, 2023, by Michigan's Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff Chris Robinson (CR). The purpose of this inspection was to follow up on an opacity/odor complaint (Complaint No. C-23-00819) received by the AQD on February 27, 2023, and to determine Johnston's compliance status with respect to applicable air quality rules and regulations.

Prior to entry CR surveyed the perimeter of the facility for odors and visible emissions. Although steam was exiting one of the short stacks on the south end of the building no emissions or odors were observed. CR then entered the facility and met with Christopher Wescott, Johnston's Mechanical Engineer/Facilities Manager. The February 27, 2023, opacity/odor complaint and current operations were discussed, and a walkthrough of the facility followed.

Weather conditions were cloudy, approximately 38°F with northwest winds at 10 mph (www.weatherunderground.com).

B) FACILITY DESCRIPTION

Johnston manufactures custom commercial and industrial boilers of various sizes. The manufacturing processes include welding, metal cutting (mechanical, torch, and plasma), grinding, sanding, and bending, heat treating, pressure testing, x-ray testing, painting, and trial operation. With the exception of one of the welding stations all emissions are vented to the in-plant environment. The welding station that is vented outside utilizes dry filters.

C) COMPLIANCE EVALUATION

The welding and plasma cutting activities appear to be exempt from Rule 201 permitting requirements per Rule 285(2)(i); the metal bending activities per Rule 285(2)(l)(i); mechanical cutting, drilling, grinding, and sanding activities per Rule 285(2)(l)(vi)(B).

In the past, the facility's oven was identified as an annealing oven. Mr. Wescott noted that the oven is for heat treating but does not operate at temperatures high enough to achieve the annealing process. This unit operates at a maximum temperature of 1,100°F. Based on a quick online search annealing steel occurs at a temperature of at least 1,400 °F. This oven is equipped with 12 burners and fueled only on natural gas. Previous inspection reports noted that this unit is "Grandfathered" from permitting requirements. Although the manufacture date could not be identified on the unit it appeared to be old. Since no other evidence was present to counter past inspection decisions, this unit still appears to be "grandfathered". CR discussed Rule 201 requirements and how this unit

could be subject if a modification or reconstruction is tripped. Currently the facility is undergoing repairs from a recent fire, however, the oven did not experience any damage.

The facility pressure tests and conducts x-ray inspections on the boilers to ensure no cracks are present in the metal. There are no emissions of concern associated with these tests.

The facility has one cold cleaner located in the maintenance area that is maintained by Safety Kleen. Instructions are posted but the lid was in the open position and not being used. CR informed Mr. Wescott that the lid needs to be closed when not in use to help prevent any volatilization of the solvent. Since the instructions were posted on the inside of the lid CR provided AQD instructions to post on the outside so that they are visible prior to opening. Cold cleaners are exempt from permitting requirements per Rule 281(2)(h) for cold cleaners that have an air/vapor interface of not more than 10 square feet.

Once the boilers have been tested, they are painted. Spraying is conducted near the test bays because they do not have a dedicated spray booth. Staff ensure all doors and building vents are closed while spraying. Two louvered powered vents are installed on the south wall. One is no longer in use and is kept closed at all times. The second is equipped with a dry filter but is kept closed and is not being used. As long as the building remains closed with no nearby ventilation and/or dry filters are being used if venting to the outside, the painting process appears to be exempt from Rule 201 permitting requirements per Rule 287(2)(c) for coating operations with a maximum monthly usage of 200 gallons. The facility uses approximately 140 - 350 gallons per year with anywhere from 2- 25 gallons being used per month, which is well under the limit in Rule 287.

The facility operates a 9.95 MMBtu/hr. natural gas fired boiler that was manufactured in 1997. The boiler appears to be exempt from Rule 201 permitting requirements per Rule 282(2)(b)(i) combustion units used for indirect heating that burn only natural gas. The boiler would not be subject to the Standards of Performance for New Stationary Sources (NSPS) as promulgated in 40 CFR, Part 60, Subpart Dc for Small Industrial-Commercial-Institutional Steam Generating Units because it has a maximum rating of less than 10 MMBtu/hour.

D) COMPLAINT FOLLOW-UP & COMPLIANCE DETERMINATION

During the inspection there were several boilers in the test bays waiting to be tested. Only one of the boilers were capable of using fuel oil but the boiler has not been hooked up because parts have been on order. The heat treat oven has been down due to the building fire and will remain down until the building's roof repairs have been completed. CR did not identify any emission units or processes currently in operation capable of generating the odors or opacity noticed by the complainant nor was Mr. Wescott aware of any recent issues.

The only suspect would have been from a crane behind the building being used for roof repairs. However, the crane did not appear to be large enough to generate emissions from behind the building that would have caused limited visibility on the road. The crane was operating during the inspection and no opacity or odors were observed. Since the issue is not ongoing the February 27, 2023, complaint is being resolved pending further issues and/or information.

Regarding the inspection, based on observations and discussions made while onsite Johnston Boiler Company appears to be operating in compliance with applicable air quality rules and regulations.

NAME _____ DATE 3/10/2023 SUPERVISOR _____