

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

N122870693

FACILITY: Evoqua Water Technologies		SRN / ID: N1228
LOCATION: 2155 112th St, HOLLAND		DISTRICT: Grand Rapids
CITY: HOLLAND		COUNTY: OTTAWA
CONTACT: Lauren Madsen , EH&S Manager		ACTIVITY DATE: 01/16/2024
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY '24 on-site inspection to determine the facility's compliance status with respect to applicable air quality rules and regulations including PTI No. 212-10 and 5-15.		
RESOLVED COMPLAINTS:		

On January 16, 2024, staff Chris Robinson (CR) from Michigan's Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) conducted a scheduled inspection of Evoqua (SRN N1228) located at 2155 112th Street in Ottawa County, Holland, Michigan. The purpose of this inspection was to determine this facility's compliance with applicable state and federal air quality rules and regulations including Permit to Install (PTI) 5-15 and General PTI No. 212-10. Prior to entry AQD staff surveyed the perimeter of the building for odors and visible emissions, none were observed.

Upon entry CR met Evoqua's Environmental Health and Safety Manager Lauren Madsen. The intent of the visit was relayed, and identification provided. The PTI was first discussed followed up by a walkthrough of the facility and then a brief post meeting. Most of the records were reviewed onsite. All records were later provided electronically for additional review. Per discussions with Lauren there have been no changes to the processes or equipment since the last inspection. Records for January 1, 2023, through December 31, 2023, were provided.

Facility Description

Evoqua manufactures water treatment systems for liquid/solid filtration and separation purposes primarily for municipalities, industrial water users and recreational facilities. This equipment consists of filter presses, sludge volume reducers, sludge dryers, centrifuges, and portable mixers.

Compliance Evaluation

The facility operates pursuant to the coating line General Permit to Install No. 212-10 and HAPs Opt-out PTI No. 5-15. One coating operation consists of two dry filter spray booths, each with its own stack which are designated as east and west booths. One spray booth is 40' x 25' and the second is 41' x 25'. The two booths are divided by a 10' roll-up door. This door can roll-up and out of the way to create one large 81' x 25' paint booth when necessary. Parts range from a few pounds to several tons. At the time of the inspection the roll-up door was up. Neither booth was in use during this inspection. The filter bank consists of an outer layer and an inner layer. They utilize a pressure drop gauge to assist in determining filter changes. The filters used in the newer (2010 installation) large booth are similar, but the new booth will shut down if the pressure drop is not within acceptable ranges.

Parts are sandblasted prior to coating. A separate enclosed area is dedicated for the sandblasting which is controlled by a baghouse and internally vented. The sandblasting operations appear to be exempt from Rule 201 permitting requirements per Rule 285(2)(I)(vi)(B). A welding area is also in use, which is internally vented and appears to be exempt from Rule 201 permitting requirements

per Rule 285(2)(i). An internally vented rotary table is used for shot blasting small parts which appears to be exempt from Rule 201 permitting requirements per Rule 285(2)(l)(vi)(B).

The facility uses two (2) Plasma tables that utilize Nitrogen gas and electricity to cut steel in a water bath. These appear exempt from Rule 201 permitting requirements per Rule 285(2)(l)(vi)(B). Emissions are released to the in-plant environment.

General PTI No. 212-10

This is a General PTI for coating operations. As required the facility is subject to the most recent version which has changed slightly since the last inspection.

This PTI limits VOC emissions from each spray booth (FG-COATING) to 2000 lbs. per month and 10 tons per year (tpy). The annual limit is based on a rolling 12-month time period. Based on the records July had the highest monthly emissions from the “Big Booth” at 627.29 lbs. of VOCs. The highest annual emissions of 2.68 tons were in November also from the “Big Booth”.

Month (2023)	Highest Monthly Single Booth Emissions (lbs.)	Highest 12-month Rolling Single Booth Emissions (tons)	12-month rolling Emissions (tons)		
			Facility wide VOCs (tons)	Highest Individual HAP Emitted (tons)	Total HAPs (tons)
January	421.14	2.56	7.21	0.37	0.97
February	535.49	2.51	7.05	0.32	0.89
March	578.62	2.59	7.01	0.32	0.86
April	426.46	2.50	6.80	0.35	0.86
May	413.38	2.30	6.47	0.35	0.82
June	239.63	2.14	6.06	0.34	0.77
July	627.29	2.34	6.11	0.34	0.79
August	322.80	2.29	5.94	0.29	0.73
September	514.98	2.34	6.01	0.29	0.72
October	570.53	2.47	6.27	0.30	0.77
November	503.78	2.58	6.39	0.31	0.83
December	488.91	2.68	6.39	0.33	0.85

Per observations and discussions, the facility is capturing all purge/clean-up solvents and waste coatings as required in FGCOATING Special Condition (SC) III.1. Waste material is containerized in drums and grounded. The containers are eventually hauled off by Safety Kleen. Based on discussion and observations made during the previous AQD inspection and this one the facility is using HVLP spray guns as required in FG-COATING SC IV.1. No changes have occurred since the previous AQD inspection. Dry filters were installed and appeared to be maintained properly as required in FG-COATINGS SC IV.2. Requirements specified in FG-COATINGS SC IV.3, VI.1-2 & VI.5-7 apply to facilities that use either thermal or catalytic oxidizers. Evoqua does not use either, therefore these conditions do not apply.

The following records are being maintained as required by FG-COATING SC VI.2.

- Purchase orders and invoices for all coatings, reducers, and purge/clean-up solvents.
- VOC content of each coating, reducer and purge/clean-up solvent used.

- Gallons of each coating, reducer and purge/clean-up solvent used.
- Monthly and annual (12-month rolling) VOC emission calculations.
- Listing from the manufacturer for the chemical composition of each coating, including the weight percent of each component used. Per discussions with Lauren this is being done through Safety Data sheets.

Evoqua is also subject to a source-wide VOC limit of 30 tons per year (based on a 12-month rolling time period) per FG-SOURCE SC I.1. Based on the records, summarized in the table above, the month with the highest 12 month rolling VOC emissions was January at 7.21 tons.

PTI No. 5-15

This PTI is the facility's Title V HAP opt-out permit limiting facility-wide aggregate HAPs to less than 22.5 tons per year and each individual HAP to less than 9.0 tons per year. FGFACILITY SC V.1 requires the facility to determine HAP content by using Manufacturers formulation data, which based on discussions with Lauren, is being done through Safety Data Sheets and they are using the higher end of the range noted. CR informed Lauren that going forward they will need to use Manufacturer's formulation data. FGFACILITY SC VI.2 requires the facility to maintain the following monthly records which were provided and are attached.

- Amount of each HAP containing material used and reclaimed.
- HAP content of each HAP containing material used.
- Monthly and annual (rolling 12-month) emission calculations for individual and aggregate HAPs.

Based on records the month with the Highest 12 month rolling total and individual HAPs was January with total HAPs at 0.97 tons and individual HAPS at 0.37 tons. Xylene is the highest emitted HAP each month.


Emissions Reporting

The facility's 2023 emission data has not yet been submitted nor is it required to be submitted until March 15, 2024. Therefore, CR reviewed the facility's 2022 emissions data which appears to be comparable to previous years with no errors.

Compliance Determination

Based on the observations made during the inspection and a review of the facility's records Evoqua appears to be in compliance with applicable air quality rules and regulations including the requirements identified in PTIs 212-10 and 5-15.

NAME



DATE

1/30/2024

SUPERVISOR

