



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Freeman Enclosure System, Batavia, OH

FROM: Valeria Apolinario, Environmental Engineer
AECAB (MN/OH)

THRU: Brian Dickens, Section Supervisor
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: Freeman Enclosure System

Facility Location: 4160 Half Acre Road, Batavia, OH

Date of Inspection: February 28, 2023

EPA Inspector(s):

1. Valeria Apolinario, Environmental Engineer
2. Virginia Galinsky, Environmental Engineer

Other Attendees:

1. Thomas Kelley, Environmental Manager

Contact Email Address: thomas.kelley@freemanenclosures.com

Purpose of Inspection: to determine compliance with the facility's Permit-to-Install and Operate (PTIO), specifically its HAP synthetic minor limit. The facility had reported above 10 tons of toluene emissions in its 2019 and 2020 annual emission reports. The inspection also focused on the facility's potential subjectivity to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Source Standards for Nine Metal Fabrication and Finishing Source Categories (Subpart 6X).

Facility Type: Miscellaneous Fabricated Metal Product Manufacturing

Facility Name: Freeman Enclosure Systems
Facility Location: 4160 Half Acre Road, Batavia, OH
Date of Inspection: February 28, 2023

Regulations Central to Inspection: Freeman Enclosure System's (Freeman) PTIO limits HAP emissions to below 10 tons per year. The PTIO also requires that for each of its spray booths, Freeman must install and operate dry particulate filters to control for particulate emissions. Freeman must conduct periodic inspections and a once per year comprehensive inspection of the filters. Freeman is also required to conduct Method 24 or 24A to determine VOC content for coatings utilized in its small and medium paint booths.

NESHAP Subpart 6X would apply to the facility if it were primarily engaged in operations of one of nine categories, including fabricated structural metal manufacturing. Subpart 6X applies to the source if it uses materials that contain metal HAP in concentrations more than 0.1 percent by mass of cadmium, chromium, lead, or nickel, and 1 percent by mass of manganese.

Arrival Time: 11:00 AM

Departure Time: 12:20 PM

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet- sent via email
- ☐ Small Business Resource Information Sheet not provided.
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Thomas Kelley.

Process Description:

Freeman Enclosure Systems (Freeman) fabricates metal enclosures that house industrial generators as well as metal fuel tanks. The facility builds these enclosures and tanks from metal sheets of either steel or aluminum. Once built, Freeman coats these enclosures and tanks. Coatings on tanks are typically rolled on and are water-based. Coatings on enclosures are sprayed on manually with high-volume low-pressure spray guns and are solvent-based. There are three paint booths known as the small, medium, and large paint booths, designated as such based on the size of the enclosure that can be painted inside each booth. Each paint booth contains filters to control for particulates. Freeman conducts metal operations such as shearing and welding for its tank fabrication process.

Staff Interview:

- Filters in each spray booth are replaced monthly and a comprehensive inspection of the paint booths is conducted yearly.
- Solvents and thinners are used to clean the spray guns after application.

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- Freeman stated that toluene was utilized on site. While unsure where it was specifically used, staff stated that most HAP emissions are from the cleaning solvents and thinners.
- Freeman utilizes the compliant coating option to comply with its VOC emission limit. This means that every coating utilized at the facility meets the VOC emission limit.
- Freeman may use steel alloys that contain the HAPs listed in Subpart 6X.
- Freeman was unsure about how VOC content had been derived for its coatings.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations: U.S. EPA noted that a few particulate filters at the large paint booth were pushed through and not covering the entirety of the panel. This would allow for particulate to potentially escape through the gaps.

Photos and/or Videos: were not taken during the inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Manufacturer's recommendations/operating manual for particulate matter system
- Records of filter inspections (comprehensive and periodic)
- Copy of full emissions reports from 2019 and 2020
- Steel metal safety data sheets
- Documentation of Method 24 or 24A analysis conducted on coatings used for emission units K001 and K002

Concerns: Freeman stated that it would fix the particulate filters at the large paint booth. U.S. EPA stated its concerns of high toluene emissions reported by the facility. Freeman stated that this was most likely due to a reporting error but committed to investigating the issue and confirming and reporting to U.S. EPA the amount of toluene emissions for 2019 and 2020. U.S. EPA expressed that the PTIO required either Method 24 or 24A to determine the VOC content of the coatings used at the small and medium paint booths. Freeman committed to checking with its coatings supplier on how VOC content was derived.

DIGITAL SIGNATURES

Report Author: **VALERIA APOLINARIO**
Digitally signed by VALERIA APOLINARIO
Date: 2023.04.27 13:08:18 -05'00'

Section Supervisor: **Brian Dickens**
Digitally signed by Brian Dickens
Date: 2023.04.27 14:55:10 -05'00'