

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

TECHNICAL SUPPORT MEMORANDUM

TO: File

THROUGH: Stephen S. Ours, P.E.
Chief, Permitting and Enforcement

FROM: Olivia Achuko *Olivia Achuko*
Engineer 3/2/23

SUBJECT: **Permit No. 6964-R1 to Operate a Paint Spray Booth at Northeast Iron Works, Inc.**

DATE: February 7, 2023

BACKGROUND INFORMATION

A permit application was received by the Air Quality Division (AQD) on October 19, 2021 for renewal of a permit to continue to operate an existing paint spray booth at the Northeast Iron Works, Inc. facility at 2632 Douglas Street NE, Washington, DC. The applicant is Northeast Iron Works, Inc. who also submitted a certificate of clean hands with the application. The responsible person listed for operating the paint booth and complying with permit conditions is the President of the facility; Mr. Daniel Pronio at (202) 529-9440.

The permit action is scheduled to be published in the DC Register on March 10, 2023. Public comments for the permit action will be solicited through April 10, 2023.

Northeast Iron Works, Inc. has not requested that any of the materials submitted with this application be held confidential.

TECHNICAL INFORMATION

The equipment to be covered by this permit is a paint booth used primarily for “ornamental” paint jobs (such as hand railings). The activities at this location include paint spraying using high volume low pressure (HVLP) spray guns as well as manual applications using rollers, paint brushes, and aerosol spray cans to apply paint. The majority of the work will be performed on metal products, with some painting on plastic and wood. No chemical stripping operations will occur at this location.

The applicant has indicated that they will not use coatings containing target hazardous air pollutants regulated under 40 CFR 63, Subpart HHHHHH. The applicant has also indicated that carbon filters with a MERV 8 rating are installed on the paint booth that control odors as well as pollutant emissions. The applicant has indicated that they do not intend to perform any coating of

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metal furniture in the paint booth. The release height of the exhaust is approximately 24 feet above grade.

REGULATORY REVIEW

Chapter 2, Section 200: General Permit Requirements:

A paint spray paint booth is a potential air pollution source because paint contains volatile organic compounds and particulate matter. Thus a Chapter 2 permit is required.

20 DCMR Chapter 5: Source Monitoring and Testing

All applicable record keeping requirements were included in Condition V of the permit and are based on 20 DCMR 500.8, except where specific record keeping is required by another regulation.

20 DCMR Chapter 6, Section 606: Visible Emissions

The visible emissions limitations of 20 DCMR 606 are applicable to this facility. Proper operation of the equipment and maintenance of paint booth filters would preclude any visible emissions, even during startup or shutdown, so Condition II(c) requires that no visible emissions be emitted.

20 DCMR Chapter 7, Section 700: Miscellaneous Volatile Organic Compounds (VOCs)

The requirements of 20 DCMR 700 were included in the permit. Because the facility does not intend to perform activities regulated by other sections of Chapter 7, such as mobile equipment repair and refinishing, most activities occurring in this unit will be regulated under this section. Many of the monitoring and record keeping requirements in the permit are designed to document compliance with this section.

20 DCMR Chapter 7, Section 708: Non-photochemically Reactive Solvents

While not identified as an activity at the facility, in case any activities using non-photochemically reactive solvents are performed at the facility, the requirements of 20 DCMR 708 have been included in the permit. The rule limits aggregate non-photochemically reactive solvent emissions to less than 8 lb/hr and 40 lb/day. This requirement was placed in Condition II(d) of the permit.

20 DCMR Chapter 7, Section 718: Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations

The requirements of 20 DCMR 718 are not applicable to this paint spray booth as the facility does not coat mobile equipment. As such, this section has not been addressed in this permit.

20 DCMR Chapter 7, Sections 743 through 749: Adhesives and Sealants

In the application, the applicant indicated that they use adhesives and/or sealants, but only those supplied by manufacturers in 16 ounce containers or smaller. This activity is exempt from this set of regulations per 20 DCMR 745.1(e). However, to provide some flexibility to the facility,

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certain other exempt categories were also added as allowable activities under permit Condition III(b). Additionally, other activities authorized by these regulations can be approved by the Department in writing pursuant to Condition III(b)(4).

20 DCMR Chapter 7, Section 770: Miscellaneous Industrial Solvent Cleaning Operations

With some exceptions listed in 20 DCMR 770.9, this section applies to any person who:

- (a) Uses any industrial cleaning solvent in a solvent cleaning operation in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process where the facility emits at least fifteen pounds (15 lb.) of VOC emissions in any one (1) day from all solvent cleaning operations shall be subject to this section through § 770.10(a);
- (b) Sells, supplies, offers for sale, or manufactures any industrial cleaning solvent for use in the District of Columbia shall be subject to this section through § 770.10(a); or
- (c) Uses any industrial cleaning solvent in a solvent cleaning operation in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process where the facility emits less than fifteen pounds (15 lb.) of VOC emissions in any one (1) day from all solvent cleaning operations shall be subject to § 770.10(b).

Potentially relevant exceptions in 20 DCMR 770.9 are as follows:

- 1. Cleaning and surface preparation operations subject to Condition III(b);
- 2. Products used to strip cured inks, coatings, and adhesives;
- 3. Cleaning products used for janitorial purposes, including graffiti remover products;
- 4. Products used to clean resin, coating, ink, and adhesive mixing, molding, and application equipment; and
- 5. Cleaning and surface preparation operations related to application of coatings subject to regulation under 20 DCMR 773 to 778 (AIM) to the extent the coatings are used as architectural and industrial maintenance coatings.

It is not expected that this applicant will use large amounts of solvents covered by this section, but it is possible that such solvents will be used. As such, Condition II(e) of the permit was added to limit emissions from such use to below 15 pounds per day, facility-wide. Monitoring and record keeping requirements were added to Conditions IV(h) and V(c), respectively.

20 DCMR Chapter 7, Sections 773-778: Architectural and Industrial Maintenance Coating

The “Architectural and Industrial Maintenance Coating” requirements of 20 DCMR 773 through 778 are not applicable to this paint spray booth as the facility is only painting architectural

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equipment in a shop (ie. “shop application” as defined in 20 DCMR 799). As such, these sections have not been addressed in this permit.

20 DCMR Chapter 9, Section 903: Odorous or Other Nuisance Air Pollutants

“An emission into the atmosphere of odorous or other air pollutants from any source in any quantity and of any characteristic, and duration which is, or is likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life or property is prohibited [20 DCMR 903.1]” is applicable to all sources. It is contained in Condition II(c) of the permit. The community in the area of this shop has historically had concerns about paint odors that may or may not be coming from this shop. As such, a requirement to use filters that have activated carbon in them to control odors was adopted in the previous version of this permit and has continued to be included as a requirement in Condition III(g) of the permit. These filters must be replaced sufficiently often to ensure compliance with 20 DCMR 903. Additionally, Condition III(d) requires the exhaust stack to vent at least 20 feet above grade and be designed sufficiently to ensure compliance with 20 DCMR 903.

40 CFR 60, Subpart EE: Standards of Performance for Surface Coating of Metal Furniture

The applicant has indicated that they do not intend to perform any coating of metal furniture in their paint booth. Their reported SIC code, 3446, is not one of those identified as related to metal furniture coating. As such, this regulation does not apply. However, in order to ensure compliance, Condition III(j) of the permit prohibits metal furniture coating subject to this subpart.

40 CFR 63 Subparts MMMM, PPPP, QQQQ, RRRR: National Emission Standards for Hazardous Air Pollutants (NESHAPs)

Subparts MMMM, PPPP, QQQQ, and RRRR relate to NESHAP requirements for surface coatings of miscellaneous metal parts and products, plastic parts and products, wood building products, and metal furniture, respectively. None these subparts are applicable to this paint spray booth as the facility does not use coatings and/or other materials used in painting operations in quantities that meet or exceed the defined minimum limits necessary to trigger applicability of the said Subparts.

40 CFR 63 Subpart HHHHHH: National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

This subpart applies to paint stripping and miscellaneous surface coating operations at area sources. This subpart is not applicable to the paint booth in question because it does not perform chemical paint stripping, does not paint any motor vehicles or mobile equipment, and does not use coatings that contain any target HAP (specifically chromium, lead, manganese, nickel, or cadmium). As such, the requirements of this regulation have not been included in the permit, but requirements to ensure that the facility remains exempt are included in Conditions III(a), (c), and (f)(1).

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40 CFR 63 Subpart XXXXXX: National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

AQD determined this regulation for metal fabrication was not applicable to the facility because its SIC code did not fall under one of the specific SIC codes for which this subpart is applicable.

RECOMMENDATIONS

The proposed project and attached permit comply with all applicable federal and District air pollution control laws and regulations.

Public comments for the permit action will be solicited from March 10, 2023 through April 10, 2023. AQD will resolve any comments received before issuing any permit. If no comments are received, I recommend that permit No. 6964-R1 be issued in accordance with 20 DCMR 200.1 and 200.2 promptly upon completion of the public review period.

SSO/NOA