Department of Energy and Environment

CHAPTER 2 TECHNICAL MEMORANDUM

TO: File
THROUGH: Stephen S. Ours, P.E. Chief, Permitting and Enforcement
FROM: Olivia Achuko Engineer Olivia Achuko
SUBJECT: Wm. P. Gelberg Inc. dba Gelberg Signs Permit Number 6545-R2 to Operate a Paint Booth at 6511 Chillum Pl. NW
DATE: February 24, 2023

BACKGROUND INFORMATION

A renewal permit application to operate one non-automotive paint spray booth was received from Wm. P. Gelberg Inc. dba Gelberg Signs on September 8, 2022. The request is to operate a custom-built paint spray booth at 6511 Chillum Place NW for the painting of signs. The permit renewal application and Certificate of Clean Hands were received by AQD on the same day. The permit fee was paid on September 12, 2022. Based on the application, no notable modification has been made on the equipment since the last permit, except that, as noted in a September 14, 2022 follow-up email to Wyatt Bohmann from Neil Brami, the applicant no longer uses a primer they previously used that contained a compound of chromium. As a result, 40 CFR 63, Subpart HHHHHH no longer applies to the facility.

The Company has not requested that any of the materials submitted with this application be held confidential.

TECHNICAL INFORMATION

The equipment at this site includes a custom built spray paint booth. There will be no use of methylene chloride (MeCl) at this facility. Additionally, the facility will not use ay coatings containing any compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd). Only manual sanding is used to remove paints.

REGULATORY REVIEW

20 DCMR Chapter 2, Section 200: General Permit Requirements

A spray paint booth is a potential air pollution source since most sign paints contain volatile organic compounds and spray painting can be a source of particulate emissions. Thus a permit is required.



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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 emission limitation of 20 DCMR 606 is applicable to this facility. Proper operation of the equipment 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 nonphotochemically 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 is not coating mobile equipment. As such, this section has not been addressed in this permit.

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

Similarly, the applicant did not identify any planned use of adhesives and sealants subject to the requirements of 20 DCMR Chapter 7, Sections 743 through 749. However, in case any such activities were to be performed, certain limited allowances authorized under those regulatory requirements have been included in Condition III(b) of the permit. Condition III(b) allows the applicant to perform other activities authorized by those regulations upon written approval from the Department.

<u>20 DCMR Chapter 7, Section 770: Miscellaneous Industrial Solvent Cleaning Operations</u> 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);

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- (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(j) and V(c), respectively.

<u>20 DCMR Chapter 7, Sections 773-778: Architectural and Industrial Maintenance Coating</u> 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 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(b) of the permit.

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<u>40 CFR Part 63, Subpart MMMM - National Emission Standards for Hazardous Air Pollutants</u> for Surface Coating of Miscellaneous Metal Parts and Products

This regulation, codified in 40 CFR § 63.3880 through 40 CFR § 63.3981, applies to activities located at a major source of HAPs. Consequently, the project is not subject to the requirements of 40 CFR Part 63, Subpart MMMM and related requirements were not included in the permit.

<u>40 CFR 63, Subpart HHHHHH – National Emission Standards for Hazardous Air Pollutants:</u> <u>Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources:</u> This regulation is codified in 40 CFR § 63.11169 through 40 CFR § 63.11180. Pursuant to 40 CFR § 63.11170, this regulation applies to a facility that is an area source of HAPs which performs one of the listed activities. The proposed project does not include any of the subject activities specified in 40 CFR § 63.11170(a) through(c). As such, the requirements of this regulation have not been included in the permit.

RECOMMENDATIONS

The application to operate the paint booth and the attached operating permit comply with all applicable federal and District air pollution control laws and regulations.

The application and draft permit will be posted for public review in the D.C. Register and on the DOEE website on March 10, 2023 and will be available for public comment through April 10, 2023. If no public comments are received, it is recommended that permit No. 6545-R2 be issued. If adverse comments are submitted or a hearing is requested, AQD will consider all comments before determining whether it is appropriate to issue the permit as drafted.

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