### GOVERNMENT OF THE DISTRICT OF COLUMBIA

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

**SUBJECT:** 

Wm. P. Gelberg Inc. T/A Gelberg Signs

Permit Number 6545-R1 to Operate a Paint Booth at 6511 Chillum Pl. NW

DATE:

July 13, 2017

### **BACKGROUND INFORMATION**

On April 30, 2012, Wm. P. Gelberg Inc. T/A Gelberg Signs was issued a permit to operate a custom built paint spray booth at 6511 Chillum Place NW for the painting of signs. This permit expired on April 26, 2015. On March 2, 2017, the Air Quality Division (AQD) issued a Notice of Violation to the facility requiring them to apply for a permit since their old permit had expired. On March 20, 2017, such a permit renewal application was received by AQD. Based on the application, no notable modification has been made on the equipment since the initial permit.

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. Only manual sanding is used to remove paints. It should be noted that certain coatings used by the facility contain chromium compounds, thus subjecting the facility to the applicability of 40 CFR 63, Subpart HHHHHHH, as discussed below.

#### 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.

### 20 DCMR Chapter 5: Source Monitoring and Testing

All applicable record keeping requirements were included in Condition V of the permit and are





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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. This more stringent requirement (required by 20 DCMR 201) is contained in Condition II(c).

## 20 DCMR Chapter 7: Volatile Organic Compound (VOC) Emissions Reduction

The requirements of 20 DCMR 700 were included in the permit. Because the facility will not be performing 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 708 could be applicable to this application, but since revisions of Chapter 7 took place affecting this section and due to questions regarding the practical enforceability of this section as revised, AQD has determined that it is not appropriate to include the requirements of 20 DCMR 708 in the permit.

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.

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.

Although the permit application did not specify the use of any adhesives, sealants, adhesive primers, or sealant primers, Condition III(b) was written to ensure that no activities trigger the requirements of 20 DCMR 743-749 (commonly known as the "adhesives and sealants rule").

## 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.

20 DCMR Chapter 14, Section 1409: Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
This regulation adopts 40 CFR 63, Subpart HHHHHHH by reference. Please see the discussion of 40 CFR 63, Subpart HHHHHHH below in "Other Regulations".

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40 CFR 63.11178 (Subpart HHHHHHH); National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources This regulation is applicable to this facility. It applies to spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as target HAPs to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment. This facility uses coatings containing compounds of chromium, and therefore is subject to this rule.

It is indicated in the application that chemical paint strippers containing methylene chloride are not used at the site. Thus, the requirements for paint stripping are generally not applicable in this case. Condition III(a) of the permit was developed to ensure that no methylene chloride containing strippers are used at the facility.

The paint spray booth must meet the design requirements of 40 CFR 63.11173(e)(2)(ii). These requirements were included in the permit as Condition III(g)(3).

Condition III(g)(1) was written to allow the facility to use only exhaust filters with 98% or higher capture efficiency per 40 CFR 63.11173(e)(2)(i).

Condition III(e) of the permit was written to ensure compliance with the paint application technique specifications in both 20 DCMR 718.11 and 40 CFR 63.11173(e)(3). Similarly, the spray gun requirements of Condition III(f) were written to ensure compliance with 40 CFR 63.11173(e)(4).

The training requirements of 40 CFR 63.11173(e)(1), (f), and (g)(3) were included in the permit as Condition III(i).

All applicable record keeping requirements were included in Condition V of the permit. It should be noted that all records will be required to be kept for five years, rather than three per 20 DCMR 500.8, due to the more stringent five year requirement in 40 CFR 63.11178 and the difficulty of having two different document retention policies for different sets of records.

The notification and reporting requirements of 40 CFR 63, Subpart HHHHHHH are contained in Conditions VI(a) through (c).

### RECOMMENDATIONS

The draft renewal permit was submitted to the D.C. Register for publication on July 21, 2017.

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 July 21, 2017 through August 21, 2017. AQD will resolve any comments received before taking any final action on the permit. If

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no adverse comments are received, I recommend that permit No. 6545-R1 be issued in accordance with 20 DCMR 200.2 promptly upon the completion of the public review period.

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