CHAPTER 2 TECHNICAL MEMORANDUM

TO: File

THROUGH: Stephen S. Ours, P.E.
Chief, Permitting Branch

FROM: Abraham T. Hagos
Environmental Engineer

SUBJECT: Goodwill First Inc.
Permit #6819
Permit to Construct and Operate a Paint Spray Booth

DATE: January 27, 2014

BACKGROUND INFORMATION

A permit application to construct and operate a paint spray booth at Goodwill Inc. located at 3001 Earl Place NE, Washington, DC 20018 was received by the Air Quality Division (AQD) on November 06, 2013 with revised submittal received January 16, 2014. The applicant is Goodwill First Inc. t/a Grand Auto.

AQD has determined that the facility is a new source of paint stripping and miscellaneous surface coating because the application indicated that the facility start-up date is January 2014 which is after September 17, 2007.

The permit action will be published in the DC Register on January 31, 2014. Public comments for the permit action will be solicited through March 3, 2014.

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 one standard paint boot for full body auto painting, sanding, priming, and paint mixing, as well as gun cleaning stations. There will be no use of methylene chloride (MeCl) at this facility. The company uses high volume low pressure (HVLP) spray guns which are cleaned in an enclosed system.
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This facility is a new source under 40 CFR 63, therefore the compliance date for 40 CFR 63, Subpart HHHHHH is the date of initial startup of the source.

Note that: The Environmental Protection Agency (EPA), “Technical Support Document for Potential to Emit Guidance Memo, Tim Smith, US. EPA/OAQPS. April 1998”, suggests that the number of jobs performed per week by a single painting area spray booth or spray area at an auto body/repair shop would not exceed 25 jobs per painting station per week and the volatile organic compound (VOC) emission factor is 9 pounds per job. That is, a potential to emit of 5.85 tons of VOC per year.

REGULATORY REVIEW

Chapter 2, Section 200: General Permit Requirements:

An auto body spray paint booth is a potential air pollution source since most auto body paint contains volatile organic compounds. Thus a Chapter 2 permit is required.

Chapter 6, Section 606: Visible Emissions

The visible emissions limitations of 20 DCMR 606 is applicable to this facility. However, proper operation of the equipment would preclude any visible emissions from being emitted into the outdoor atmosphere from the operation of the facility. This more stringent requirement (required by 20 DCMR 201) is contained in Condition II(d).

Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants

The requirements of 20 DCMR 700 were not included in the permit. The facility is regulated under 20 DCMR 718, which better covers the operations of the site. 20 DCMR 700 is not applicable when other sections of Chapter 7 are applicable to the same equipment.

The requirements of 20 DCMR 718 are applicable and have been included in the permit. The requirements of Section 718.3 are included in Condition II(b) of the permit. The associated monitoring requirements of Section 718.4 are found in Condition IV(b). A modified version of the paint application method requirements of Section 718.5 can be found in Condition III(a). Condition III(c), covering spray gun cleaning, contains a more stringent form of the requirements of Section 718.7 that is applicable to the site. The housekeeping requirements of Section 718.8 can be found in Condition III(e). The training requirements of that section can be found in Condition III(f)(1).

For all of these, appropriate record keeping requirements have been included in the permit.
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. This requirement is contained in Condition II(e) of the permit.

Other Regulations

40 CFR 63, Subpart HHHHHH, "National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources" (also known as the "Auto Body NESHAP") is applicable to the facility. The compliance date is the date of initial startup since this is a new source. Many of the operational requirements of this regulation are similar to those of 20 DCMR 718. However, there are substantial additional requirements.

To address the applicability of this regulation, 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 II(a) of the permit was developed to ensure that no methylene chloride containing strippers are used at the facility.

The paint spray booth meets the requirements of 40 CFR 63.11173(e)(2)(ii). This requirement was included in the permit as Condition III(d)(3).

Condition III(d)(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(a) of the permit was written to ensure compliance with the paint application technique specifications in both 20 DCMR 718.5 and 40 CFR 63.11173(e)(3). Similarly, Condition III(c) was 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 Conditions III(f)(2)-(4).

All applicable record keeping requirements were included in Condition V of the permit. It should be noted that 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 federally required records and District-required records.
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The notification and reporting requirements of 40 CFR 63, Subpart HHHHHH are contained in Conditions VI(a) and (b).

RECOMMENDATIONS

The application to operate the paint spray booth facility and the attached operating permit comply with all applicable federal and District air pollution control laws and regulations. Public comments for the permit action will be solicited from January 31, 2014 through March 3, 2014. AQD will resolve any comments received before issuing the permit, and if no comments are received, I recommend that permit (#6819) be issued in accordance with 20 DCMR 200.1 and 200.2.

ATH