GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment



CHAPTER 2 TECHNICAL MEMORANDUM

TO:

File

FROM:

Stephen S. Ours, P.E.

Chief, Permitting Branch

SUBJECT:

SMART Automotive

Permit #6962

Permit to Construct and Operate a Paint Spray Booth

DATE:

December 5, 2014

BACKGROUND INFORMATION

A permit application from SMART Automotive to construct and operate a paint spray booth at 2615 Evarts Street NE, Washington, DC 20018 was received by the Air Quality Division ("AQD") of the District Department of the Environment ("DDOE" or "the Department") on September 4, 2014.

AQD has determined that the facility would be considered a new source of paint stripping and miscellaneous surface coating because the facility would be constructed after the September 17, 2007 threshold in 40 CFR 63, Subpart HHHHHH. It should be noted that construction of the equipment at the site had commenced before AQD received the application.

The proposed permit action will be published in the DC Register on December 12, 2014. Public comments for the permit action will be solicited through January 12, 2015. Additionally, due to known public interest in painting operations in the neighborhood, DDOE has scheduled a public hearing for 5:30 PM on January 12, 2015 to give interested parties the opportunity to voice any comments they may have on the subject.

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 booth, full body auto painting, sanding, priming, and paint mixing, as well as gun cleaning stations. There will be no use of methylene chloride (MeCl) for paint stripping at this facility. The company proposes to use high volume low pressure (HVLP) spray guns.

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This facility would be considered a new source under 40 CFR 63 with an initial start-up date after January 9, 2008, therefore the compliance date for 40 CFR 63, Subpart HHHHHHH will be upon start-up.

Note that: The Environmental Protection Agency (EPA), "Technical Support Document for Potential to Emit Guidance Memo, Tim Smith, USEPA/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 volatile organic compound (VOC) emission factor of 9 pounds per job. Based on this, AQD has estimated that the facility would have a potential to emit of 5.85 tons of VOC per year.

REGULATORY REVIEW

20 DCMR Chapter 2: General and Non-Attainment Area Permits:

An auto body spray paint booth is a potential stationary source of air pollution since most auto body paint contains volatile organic compounds. Thus a Chapter 2 permit is required pursuant to 20 DCMR 200.1 and 200.2.

Note that, due to known painting operation odor issues in the neighborhood, SMART Automotive has agreed to use carbon filters in line with required particulate matter filters to better control odors from the operation. This requirement has been included in Condition III(d)(3) of the permit pursuant to 20 DCMR 201.

20 DCMR Chapter 6, Section 606: Visible Emissions

The visible emissions limitations of 20 DCMR 606 are 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 authority of 20 DCMR 201) is contained in Condition II(d).

20 DCMR 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) [streamlined with requirements of 40 CFR 63.11173(e)(3)]. Condition III(c), covering spray gun cleaning, contains the requirements of Section 718.7. The housekeeping requirements of Section

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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.

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. This requirement is contained in Condition II(c) of the permit.

Other Regulations

40 CFR 63, Subpart HHHHHHH, "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 will be upon start-up of the facility since this is an "new" facility with a start-up date after January 9, 2008. 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 must meet the requirements of 40 CFR 63.11173(e)(2)(ii). This requirement was included in the permit as Condition III(d)(4).

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 20 DCMR 718.7 and 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

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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.

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

RECOMMENDATIONS

Based on my review, the application to construct and operate the paint spray booth facility and the attached construction and operation permit comply with all applicable federal and District air pollution control laws and regulations.

Public comments on the application and proposed permit action will be solicited from December 12, 2014 through January 12, 2015. Due to known public interest in painting operations in the vicinity of the proposed facility, DDOE has scheduled a public hearing for January 12, 2015 at 5:30 PM. AQD will address any comments received before taking any final action on the permit application. If no comments are received, I recommend that permit #6962 be issued in accordance with 20 DCMR 200.2.

SSO