GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

TECHNICAL SUPPORT MEMORANDUM

TO:

File

THROUGH: Stephen S. Ours, P.E.

Chief. Permitting Branch

FROM:

John C. Nwoke

Environmental Engineer

SUBJECT:

U.S. Senate Sergeant at Arms

U.S. Government Publishing Office Non-Auto Body Paint Spray Booth Permit #6613-R1 to Operate a Non-Auto Body Paint Spray Booth

DATE:

February 8, 2016

BACKGROUND INFORMATION

A renewal permit application to operate a paint spray booth at U.S. Government Publishing Office (formerly the U.S. Government Printing Office), located at 732 North Capitol Street NW, Washington, DC 20401, was received by the Air Quality Division (AQD) on October 30, 2015. The applicant is U.S. Senate Sergeant at Arms.

AQD has determined that the facility is an existing source of non-auto body painting, nonmethylene chloride stripping and miscellaneous surface coating because this evaluation was already conducted at the time of initial application. This information was confirmed in the renewal application. Additionally, this application is request for a renewal permit of an existing unit. The facility's startup date was in June 2012, which is prior to September 17, 2007 – the date of applicability of the surface coating NESHAP regulations.

The permit action will be published in the DC Register on February 19, 2016. Public comments for the permit action will be solicited through March 21, 2016.

The U.S. Senate Sergeant at Arms 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 side down draft paint booth, model SDD-SD Global Finishing Solutions, surface coating equipment, sanding, priming, and chemical stripping equipment, as well as paint mixing and 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 and small application touch-up jobs. The majority of work will be performed on wood products such as desks and cabinets. Other miscellaneous wooden and metal items may be

CHAPTER 2 TECHNICAL MEMORANDUM

U.S. Senate Sergeant at Arms

Permit #6613-R1 to Operate a Non-Auto Body Paint Spray Booth at U.S. Government Publishing Office

February 8, 2016

Page 2

painted at the paint booth from time to time. However, the use of spray guns is limited to wood items and paint will not be sprayed onto the metal items. Equipment cleaning occurs in an enclosed system. The facility will maintain the operating standards in effect as at October 19, 2012, the date of issuance of the initial permit that is now being renewed.

This facility is an existing source under 40 CFR 63, therefore the compliance date for 40 CFR 63, Subpart HHHHHHH is January 10, 2011.

REGULATORY REVIEW

Chapter 2, Section 200: General Permit Requirements:

A spray paint booth is a potential air pollution source since paint contains VOCs. 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(c).

Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants

The requirements of 20 DCMR 700 were included in the permit because most of the activities occurring in this unit will be regulated under this section. The facility will not be performing activities regulated by other sections of Chapter 7, such as mobile equipment repair and refinishing, hence those sections were excluded from the permit.

20 DCMR 708 could be applicable to this application, but the enforceability of it as a practical matter is an issue that is yet to be resolved. Consequently, this provision was not included in the permit.

The requirements of 20 DCMR 718 is not applicable to this paint booth as the facility is not coating mobile equipment. Consequently, this section has 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").

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

CHAPTER 2 TECHNICAL MEMORANDUM

U.S. Senate Sergeant at Arms

Permit #6613-R1 to Operate a Non-Auto Body Paint Spray Booth at U.S. Government Publishing Office

February 8, 2016 Page 3

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(b) of the permit.

40 CFR Part 60 Subpart EE-Standard of Performance for Surface Coating of Metal Furniture Except for record keeping, this subpart does not apply to the owner or operator of a metal furniture surface coating operation that uses less than 3,842 liters (1,105 gallons) of coating per year for metal furniture coating. Per 20 DCMR 60.310, purchase or inventory records of annual coating usage must be maintained at the source for a period of at least two (2) years. The permit language includes a requirement to not exceed this usage level as well as to keep appropriate records to ensure compliance with that requirement.

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

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 of 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 HHHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources It has been determined that this regulation is not applicable to the equipment to be permitted. Applicability of this subpart is determined pursuant to 40 CFR 63.11170. The facility is an area source of HAPs. The facility does not use methylene chloride for the removal of dried paint. however to ensure that this remains the case, Condition III(a) has been included in the permit to prohibit such use. The paint booth is not used to paint motor vehicles or mobile equipment, however to ensure that this remains the case, Condition III(c) prohibits such use. The applicant primarily coats wood substrates and reports never coating plastic substrates. However, they do report occasional coating of metal substrates. During the previous permitting process in 2012, the applicant reported that they would not use coatings with target HAPs defined in 63.11180. and hence use of these materials was prohibited whenever using spray guns in the old permit. However, the new application indicates that chromium is a component of five of the coatings used in the booth. However, the application indicates that they will not be sprayed on metal or plastic substrates. Therefore Condition III(f)(1) prohibits such operations to ensure that 40 CFR 60.11170(a)(3) is not triggered.

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.

CHAPTER 2 TECHNICAL MEMORANDUM

U.S. Senate Sergeant at Arms

Permit #6613-R1 to Operate a Non-Auto Body Paint Spray Booth at U.S. Government Publishing Office

February 8, 2016

Page 4

Public comments for the permit action will be solicited from February 19, 2016 through March 21, 2016. AQD will resolve any comments received before issuing the permit, and if no comments are received, I recommend that permit (#6613-R1) be issued in accordance with 20 DCMR 200.1 and 200.2.

SSO/JCN