

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 Branch

FROM: Pilar Jackson
Environmental Protection Specialist

SUBJECT: Wonder Automotive Inc. Permit No. 7433 to Operate an Automotive Paint Spray Booth

DATE: December 22, 2025

BACKGROUND INFORMATION

A permit application to operate an existing shop-built walk-in style spray paint booth at the Wonder Automotive Inc. automotive shop located at 1141 Bladensburg Rd NE Washington DC 20002, was received by the Air Quality Division (AQD) on October 20, 2025. No Odor Control Plan (OCP) has been received to date. Wonder Automotive Inc. submitted a Certificate of Clean Hands on October 20, 2025. The application fee payment was received on October 28, 2025.

This booth is used for full body painting as well as sanding and priming operations. High volume low pressure (HVLV) spray guns are used. There is no emission control device (carbon filters, carbon beds, thermal oxidizers, etc.) beyond the required particulate matter filters.

The facility is a new source under the Department of Energy and Environment's "Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations Regulations" (20 DCMR 718). Any automobile refinishing facility that starts operation after February 9, 2016, is a new source under this regulation. According to the application, the Wonder Automotive facility started up as a spray paint shop on July 20, 2020.

This permit action will be published in the DC Register on January 2, 2026. Public comments for the permit action will be solicited through February 2, 2026.

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

TECHNICAL INFORMATION

The equipment at this site includes a Tuxedo Distributors cross flow spray paint booth for full body painting operations. Activities at the facility will also include sanding and priming. There

Chapter 2 Technical Memorandum

Wonder Automotive Inc.

Permit No. 7433 to Operate an Automotive Spray Paint Booth

December 22, 2025

Page 2

will be no use of methylene chloride (MeCl) at this facility. The company indicated that HVLP spray guns will be used, as authorized under 20 DCMR 718.

It is difficult to accurately estimate emissions from an automotive paint spray booth due to the variations of coatings, job sizes, etc. that occur in a typical automotive paint shop. However, in order to determine a reasonable estimate for purposes of this evaluation, AQD referenced EPA's "Technical Support Document for Potential to Emit Guidance memo. Documentation of Emission Calculations" [Tim Smith, USEPA/OAQPS, April 1998]. Using an average VOC content of 3.5 pounds per gallon, this document estimates 4.8 pounds of VOCs could be emitted per average job. This document also estimates that a single paint booth could be used for no more than 25 jobs per week. Based on these estimates, AQD calculated potential emissions from the single paint booth of 3.12 tons per year of VOCs.

REGULATORY REVIEW

20 DCMR Chapter 2, Section 200: General Permit Requirements

Pursuant to 20 DCMR 200.1 and 200.2, because the equipment is a stationary source that has the potential to emit air pollutants, a permit from the Department must be obtained to operate the equipment.

20 DCMR Chapter 2, Section 204: Permit Requirements for Sources Affecting Non-Attainment Areas:

The potential to emit VOCs of approximately 3.12 tons per year is well below the 25 TPY value meeting the definition of "significant". As a result, the requirements of this section are not applicable.

20 DCMR Chapter 2, Section 205: New Source Performance Standards (NSPS):

There are no NSPS subparts applicable to the paint booth. See the discussion of federal rules below.

20 DCMR Chapter 2, Section 209: Permit Requirements for Non-Major Stationary Sources (Minor New Source Review):

The potential VOC emissions (approximately 3.12 tons per year) are below the 5 TPY threshold for applicability of this regulation. As such, the requirements of this regulation are not applicable.

20 DCMR Chapter 6, Section 606: Visible Emissions

The visible emissions limitations of 20 DCMR 606 are applicable to this facility. Proper operation and maintenance of the equipment would preclude any visible emissions from being emitted into the outdoor atmosphere from the operation of the paint/spray booth and other equipment at the facility. These limits are reflected in Condition II(i) of the permit. Other requirements from 20 DCMR 606, including maintenance, staff training, and record keeping are

Chapter 2 Technical Memorandum

Wonder Automotive Inc.

Permit No. 7433 to Operate an Automotive Spray Paint Booth

December 22, 2025

Page 3

found throughout the permit, in some cases streamlined with more specific requirements from 20 DCMR 718 and/or 40 CFR 63, Subpart HHHHHH.

Additionally, this regulation establishes certain operational, maintenance, and training requirements which have been incorporated into Conditions III(e), (f), (g) and (h). Record keeping requirements are incorporated into Conditions V(h) and (l).

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

The requirements of 20 DCMR 700 were not included in the permit as they are not applicable to sources to which 20 DCMR 718 is applicable.

The facility is regulated under 20 DCMR 718, which is the District of Columbia's primary regulation for controlling air emissions from automotive painting operations.

The highlights of the regulatory requirements include the following:

- Limits on allowable VOC content in coatings and solvents [Conditions II(b) and (c)];
- Limits on the coating methods and spray guns allowed and spray gun cleaning methods [Conditions III(a) and (d) and related conditions];
- Emission point (stack) discharge height and exhaust velocity requirements [Condition III(c)] (primarily intended to reduce odor at ground level);
- Paint booth and filter specifications [Condition III(e)]; and
- Housekeeping and training requirements [Condition III(f)].

For all of these, appropriate monitoring, testing, and record keeping requirements have been included in the permit to ensure that compliance status can be determined.

The applicant provided a photograph of their stack to document compliance with stack design requirements.

20 DCMR Chapter 9, Section 903: Odorous or Other Nuisance Air Pollutants-

20 DCMR 903.1 contains the following requirement: "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", which applies to all sources. It is therefore included as Condition II(h) of the permit.

A substantial revision to this regulation went into effect on August 4, 2023. Among other requirements, this revision required that the facility submit an odor control plan (OCP), meeting the requirements of 20 DCMR 903.5, for this facility. No such plan was received. Therefore, Condition III(i) has been added to the permit to establish a deadline to come into compliance with this requirement by submitting an OCP.

Chapter 2 Technical Memorandum

Wonder Automotive Inc.

Permit No. 7433 to Operate an Automotive Spray Paint Booth

December 22, 2025

Page 4

Once an OCP has been approved, pursuant to 20 DCMR 903.8, Wonder Automotive Inc. must implement the OCP on the timeline in the approved OCP. This requirement is included in Condition III(j) of the permit.

One addition to the regulation, 20 DCMR 903.13(b), adds an affirmative defense provision which applies to the facility. As such, this provision has also been added to Condition III(k).

In the future, in accordance with 20 DCMR § 903.13(a), if DOEE determines that the OCP is inadequate to prevent violations of 20 DCMR § 903.1, DOEE may require Wonder Automotive Inc. to modify the OCP in accordance with the procedures under 20 DCMR § 903.7. This is specified in Condition III(k)(i) of the permit.

Record keeping and reporting requirements related to the OCP are also included in Conditions V(j) and VI(g) 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 HHHHHH by reference. Please see the discussion of 40 CFR 63, Subpart HHHHHH below in “Federal Regulations”.

Federal Regulations:

40 CFR 60, Subpart MM: Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations for which Construction, Modification or Reconstruction Commenced After October 5, 1979, and On or Before May 18, 2022

This regulation applies to equipment in automobile or light-duty truck assembly plants. This facility is not such a plant. Therefore, this regulation does not apply.

40 CFR 63, Subpart HHHHHH, “National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources”

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 rule applies to all motor vehicle and mobile equipment surface coating operations that paint with hazardous air pollutants (HAPs), including the collision repair industry. Many of the operational requirements of this regulation are similar to those of 20 DCMR 718. In some cases, 20 DCMR 718 references 40 CFR 63, Subpart HHHHHH.

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.

Chapter 2 Technical Memorandum

Wonder Automotive Inc.

Permit No. 7433 to Operate an Automotive Spray Paint Booth

December 22, 2025

Page 5

Condition III(e)(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).

The paint spray booth must meet the design requirements of 40 CFR 63.11173(e)(2)(ii) since it is used for full body painting. These requirements were included in the permit as Condition III(e)(3).

Condition III(a) 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(d) were written to ensure compliance with 40 CFR 63.11173(e)(4) and 20 DCMR 718.15.

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

All applicable recordkeeping 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, the similar requirement in 20 DCMR 718.23, 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 HHHHHH are contained in Conditions VI(a) through (d).

RECOMMENDATIONS

The application to operate the automotive spray paint booth 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 2, 2026 through February 2, 2026. AQD will address any comments received before taking any final action on the permit application. If no adverse comments are received, I recommend that permit No. 7433 be issued in accordance with 20 DCMR 200.2 promptly upon the completion of the public review period.

SSO/PMJ