

GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment



Air Quality Division

CHAPTER 2 TECHNICAL MEMORANDUM

TO: File

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SUBJECT: Source Category Permit to Operate Area Source Perchloroethylene Dry Cleaning Facilities

DATE: March 12, 2014

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**BACKGROUND INFORMATION**

The Air Quality Division (“AQD”) of the District Department of Environment (“DDOE” or “the Department”) developed a source category permit to operate an area source dry-cleaning facility using perchloroethylene as a cleaning solvent. This source category permit will expedite the permitting process by simplifying permitting paperwork, not requiring a notice and comment period for each dry cleaning facility applicant, and reducing DDOE permit-review time. The source category permit implements District of Columbia (“District”) environmental laws and regulations, including the recently enacted restrictions on the use of perchloroethylene or n-propyl bromide, and the restrictions of using these chemicals within 200 feet of a child-occupied facility. The permit also implements EPA standards for perchloroethylene air emissions at dry cleaning facilities, according to 40 C.F.R. Part 63, Subpart M.

All dry cleaning facilities using perchloroethylene in the District are required to obtain a source category permit from the Department pursuant to D.C. Official Code § 8-108.03(d)(1).

**TECHNICAL INFORMATION**

This source category permit is applicable to all area source dry cleaning establishments using perchloroethylene (also known as tetrachloroethylene or perc or PCE) as a dry cleaning solvent in the District of Columbia who submit an application to the District Department of the Environment (“DDOE” or “the Department”), Air Quality Division (“AQD”) and are approved for coverage under this permit, either actively or by passive approval which will occur 30 days



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after submission of the application to AQD unless AQD objects to the approval in writing in that timeframe.

This source category permit covers only the equipment at the facility using perchloroethylene as a dry cleaning solvent. It does not cover other equipment regulated under Title 20 of the District of Columbia Municipal Regulations (20 DCMR) including boilers, generators and any other equipment at the facility capable of emitting air pollutants. If any entity owns, operates, or plans to install any equipment of this sort, they should consult with AQD to determine the applicability of any other permitting requirements pursuant to 20 DCMR 200.

This source category permit does not cover major source dry cleaning establishments emitting more than 10 tons per year of perchloroethylene. This equates to a facility using only dry-to-dry machines and purchasing greater than 2,100 gallons of perchloroethylene yearly. Any such sources should apply for a facility-specific permit from the Department, unless a separate source category permit is issued for that category of sources.

This source category permit does not permit installation of new dry cleaning machines designed to use perchloroethylene or n-propyl bromide as a cleaning agent for clothes or other fabrics. Such installations are prohibited after January 1, 2014 by D.C. Official Code § 8-108.03.

This source category permit is not applicable to any dry cleaning establishment proposing to use perchloroethylene or n-propyl bromide as a cleaning agent for clothes or other fabrics that is located within 200 feet of an existing child-occupied facility<sup>1</sup>, except where the dry cleaning establishment has used such cleaning agents within 90 days before April 20, 2013. [D.C. Official Code § 8-108.03(d)(2)]

Most of the requirements of the permit come from the federal National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities (40 C.F.R. Part 63, Subpart M) and will be discussed in more detail in the “Regulatory Review” section below.

## **REGULATORY REVIEW**

### **Chapter 2, Section 200: General Permit Requirements**

The provisions of 20 DCMR 200 are applicable to the dry cleaning facilities as a stationary source of air pollution. A permit is therefore required to construct and subsequently operate the perchloroethylene dry cleaning facility equipment pursuant to 20 DCMR 200.1 and 200.2. This

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<sup>1</sup> A “child-occupied facility” means a building, or portion of a building, which, as part of its function, receives children under 6 years of age on a regular basis and is required to obtain a certificate of occupancy as a precondition to performing that function. The term “child-occupied facility” includes a daycare center, nursery, preschool center, kindergarten classroom, child development center, child development home, child development facility, child-placing agency, infant care center, or similar entity. The location of a child-occupied facility as part of a larger structure does not make the entire structure a child-occupied facility. Only the portion of the facility occupied or regularly visited by children 6 years of age shall be considered the child-occupied facility. [D.C. Official Code § 8-108.03(c)]

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source category permit only covers operation of existing sources and is to be issued pursuant to the procedures set forth in 20 DCMR 200.6 for source category permits.

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

This permit does not cover construction of new sources, therefore, pursuant to 20 DCMR 204.1, a major non-attainment new source review analysis is not required.

#### Chapter 2, Section 205: New Source Performance Standards

Subsection 205.1 of 20 DCMR adopts the federal New Source Performance Standards (NSPS) as in effect on September 30, 1997. Additionally, in order to be sufficiently protective of public health pursuant to 20 DCMR 201, the Department places all current NSPS standards into all Chapter 2 permits issued. However, this source category permit does not address any source category regulated under any NSPS.

#### Chapter 3: Operating Permits and Acid Rain Programs

This source category permit does not cover major perchloroethylene dry cleaner facilities. According to 40 C.F.R. §63.320(g), a dry cleaning facility is major if it emits or has the potential to emit more than 10 tons per year of perchloroethylene to the atmosphere. It also states that, in lieu of measuring a facility's potential to emit perchloroethylene emissions or determining a facility's potential to emit perchloroethylene emissions, a dry cleaning facility is a major source if: (1) It includes only dry-to-dry machine(s) and has a total yearly perchloroethylene consumption greater than 8,000 liters (2,100 gallons) as determined according to § 63.323(d)..."

This source category permit has been written to only cover area source dry cleaners using less than 2,100 gallons of perchloroethylene per 12 month period. As such, Chapter 3 is not applicable to the facilities covered.

#### Chapter 6: Particulates

20 DCMR 600 does not apply to this source category, except for 20 DCMR 606 (Visible Emissions), which is included in the permit in Condition III(a). Note that any visible emissions, including during start-up or shut-down would be a sign of problematic/improper operation. As such, the exceptions to the zero percent opacity standard have not been included in this permit.

#### Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants

20 DCMR Chapter 7 regulates volatile organic compound (VOC) emissions in the District. Because perchloroethylene is not considered a VOC pursuant to 40 CFR § 51.100, this regulation is not applicable to perchloroethylene emitting dry cleaning equipment.

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#### **Chapter 8: Asbestos, Sulfur, Nitrogen Oxides, and Lead**

The fuel sulfur provisions of 20 DCMR 801 are not applicable because equipment covered by this permit does use fuel oil. Similarly, the NO<sub>x</sub> RACT provisions of 20 DCMR 805 are not applicable because the equipment covered by the permit does not emit NO<sub>x</sub>. While there may be equipment at the facilities, such as boilers, subject to these requirements, these units are not covered by this source category permit. This point is clarified in Condition I(b) of the permit. Similarly, while the requirements of 20 DCMR 800, covering asbestos abatement, may become applicable to a facility, the abatement process would be handled through a different permitting process, not through this source category permit.

#### **Chapter 9, Section 903: Odorous or Other Nuisance Air Pollutants**

20 DCMR 903.1 is applicable to this source category permit and is covered in Condition III(b) of the permit.

#### **Other Regulations**

##### **40 C.F.R. Part 63, Subpart M – National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities**

This source category permit is designed specifically to cover all area source dry cleaners covered by this regulation. As such, the requirements of this regulation make up the majority of the permit requirements.

Pursuant to this regulation, facilities were historically required to submit initial notifications to the District and the U.S. Environmental Protection Agency (EPA). The requirements of these notifications have been included in the permit application form so that each facility applying for coverage under this source category permit will meet those notification requirements and provide updated information to the Department.

Additionally, the permit clarifies what types of equipment, including control devices and monitoring devices are required for covered dry cleaning operations and specifies certain operating requirements for these sources.

The permit also includes monitoring requirements from this regulation such as requirements to perform leak detection testing on a bi-weekly or weekly basis (as applicable for the size of the facility) and requirements to repair all leaks within specified timeframes. All relevant work practices required by this regulation are also represented in the permit.

The facilities must also track perchloroethylene purchases to determine consumption rates.

Records of required maintenance, monitoring, and testing are all required to be maintained at the facility for a period of five years.

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### **RECOMMENDATIONS**

Notice of availability of the draft permit for public comment and the availability of the option to request a public hearing on this subject will be posted in the D.C. Register and on the Department's website on March 14, 2014 and will be available for public comment or hearing requests through April 14, 2014.

The attached proposed permit complies with all applicable federal and District air pollution control laws and regulations. We recommend that the attached source category permit #6866-SC be issued upon completion of the public review period, assuming no adverse comments are received.

If adverse comments are received, such comments will be addressed prior to issuance of any final permit for this source category.

SSO/WR

