

CHAPTER 5 SOURCE MONITORING AND TESTING**Section**

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500 RECORDS AND REPORTS

500.1 The Mayor may require any person engaged in operations which may pollute the air or the handling of products the use of which may result in air pollution to file with him or her written reports containing information concerning the following:

- (a) Location and description of the source;
- (b) The chemical composition, physical properties, and the amount of any material used; and
- (c) Any other information that the Mayor shall require for the enforcement of this subtitle.

500.2 The owner or operator of a stationary source which emits twenty-five (25) tons or more per year of any air pollutant shall maintain written records of the nature and amount of emissions of the source. The records shall be made available to the Mayor during regular business hours, upon reasonable notice and shall include the following:

- (a) Emission data from stationary source monitoring and measuring devices required by § 501; and
- (b) The results of sampling of emissions, showing sampling methods and procedures used.

500.3 Emission data secured as the result of this subtitle, or other provisions of law shall be available for public inspection during regular business hours or by appointment; provided, that confidential handling of this data may be requested in accordance with § 106 of this subtitle.

500.4 All parties in the gasoline distribution network, which includes refiners, importers, terminals, retailers, wholesale purchaser-consumers, carriers and distributors, shall generate and maintain, for a period not less than three (3) years, records detailing compliance with § 904.

500.5 Records shall be made available for review by the Mayor, upon request, during normal business hours, or submitted to the Mayor for review upon request. These

records shall include, as applicable, the following:

- (a) The owner of the gasoline;
- (b) The volume of gasoline;
- (c) The identification and results of tests utilized to determine the percentage by weight of component oxygenates;
- (d) The oxygen content by weight of the gasoline;
- (e) The type of oxygenate and, when available, the percentage by volume;
- (f) The results of any quality assurance tests performed;
- (g) The name and address of the person(s) from whom the gasoline was purchased;
- (h) The name and address of the person(s) to whom the gasoline was sold or transferred; and
- (i) If applicable, the designation of the gasoline.

500.6 Retailers shall comply with §§ 500.5(a) through (g) of this section.

500.7 Each time gasoline is transferred as required under § 904, the transferor shall provide the transferee a transfer document, that is, manifest, invoice, bill of lading, copies of which shall be maintained by the transferee for a period of not less than three (3) years, and which shall contain the following information:

- (a) The date of the transfer;
- (b) The name and address of the transferor;
- (c) The name and address of the transferee;
- (d) The location of the gasoline at the time of the transfer if different from that required by paragraph (c) of this subsection;
- (e) The volume of gasoline transferred;
- (f) The oxygen content by weight of the gasoline transferred;
- (g) A product certification statement that states one of the following:
 - (1) The oxygen content of all gasoline(s) listed contains two and seven tenths to two and nine tenths percent (2.7 to 2.9%) by weight with

ethers; or

- (2) The oxygen content of all gasoline(s) listed contains two and seven tenths to three and five tenths percents (2.7 to 3.5%) by weight with alcohols; and

- (h) The destination of the gasoline.

500.8 The owner or operator of a stationary source shall maintain the records required by this chapter for not less than three (3) years.

500.9 The owner or operator of a stationary source which emits twenty-five (25) tons or more per year of oxides of nitrogen or volatile organic compounds shall submit to the Mayor a statement showing the actual emissions of oxides of nitrogen and volatile organic compounds from that source. The first emission statement shall be submitted no later than April 15, 1993, for the previous calendar year, with subsequent emission statements submitted at least every year thereafter. The emission statement shall contain, at a minimum, the following information:

- (a) Certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. The certification shall include the full name, title, signature, date of signature, and the telephone number of the certifying individual;
- (b) Source identification information:
 - (1) Full name, physical location, and mailing address of the facility;
 - (2) Latitude and longitude; and
 - (3) Standard Industrial Classification code(s);
- (c) Operating information:
 - (1) Percentage annual throughput by season;
 - (2) Days per week on the normal operating schedule;
 - (3) Hours per day during the normal operating schedule; and
 - (4) Hours per year during the normal operating schedule;
- (d) Process rate data:
 - (1) Annual process rate; and
 - (2) Peak ozone season daily process rate;

- (e) Control equipment information:
 - (1) Current primary and secondary AFS control equipment identification codes; and
 - (2) Current control equipment efficiency. The actual efficiency shall reflect the total control efficiency from all control equipment and include downtime and maintenance degradation. If the actual control efficiency is unavailable, the design efficiency or the control efficiency limit imposed by a permit shall be used; and
- (f) Emissions information:
 - (1) Estimated actual emissions of oxides of nitrogen and volatile organic compounds at the segment level in tons per year and pounds per typical ozone season day. Actual emission estimates shall include upsets, downtime and fugitive emissions, and shall follow an emission estimation method;
 - (2) AFS estimated emissions method code;
 - (3) Calendar year for the emissions; and
 - (4) Emission factor, if applicable.

AUTHORITY: Unless otherwise noted, the authority for this chapter is § 412 of the District of Columbia Self-Government and Governmental Reorganization Act, as amended, 87 Stat 790, Pub. L. No. 93-198 codified at D.C. Official Code § 1-204.04(a) (2001); and § 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) codified at D.C. Official Code § 8-101.06 (2001); and Mayor's Order 98-44 dated April 10, 1998.

SOURCE: Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 562, 602 (February 1, 1985); as amended by § 2 of the Air Pollution Control Act of 1984 National Ambient Air Quality Standards Attainment Amendment Act of 1993, D.C. Law 10-24 (D.C. Act 10-56) published at 40 DCR 5474, 5477-79 (July 30, 1993).

501 MONITORING DEVICES

- 501.1 The Mayor shall require the owner or operator of a stationary source which emits more than one hundred (100) tons per year of any air pollutant to install, maintain, and operate, at the expense of the owner or operator, the stationary source monitoring devices necessary to enable the owner or operator and the Mayor to determine whether the source is being, or will be operated in compliance with all applicable air pollution standards, regulations, and laws. Monitoring information shall be supplied as the Mayor may require in accordance with § 500.1.
- 501.2 The owner of a major stationary source or major modification shall, after

construction of the stationary source or modification, conduct the ambient monitoring that the Mayor determines is necessary, to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

- 501.3 The owner of a major stationary source or major modification shall meet the requirements of Appendix B to 40 CFR Part 58 during the operation of monitoring stations.

SOURCE: Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 562, 602 (February 1, 1985).

502 SAMPLING, TESTS, AND MEASUREMENTS

- 502.1 The Mayor may conduct, or cause to be conducted, or require an owner or operator to conduct, tests of emission of air pollutants from any source. The Mayor shall not require an owner or operator to conduct tests with unreasonable frequency.

- 502.2 Upon request by the Mayor, the person responsible for the source to be tested shall provide necessary holes in stacks or ducts and any other safe and proper sampling and testing facilities that may be necessary for proper determination of the emission of air pollutants. The Mayor may take or cause to be taken samples of fuel by any appropriate means in the quantities he or she feels are necessary.

- 502.3 Notwithstanding any other provision to the contrary in this subtitle, the Mayor may require or approve modifications to testing and measurement procedures and methods, calculation methods and performance specifications provided in this subtitle, to take into account the following:

- (a) Specific conditions at the site or location;
- (b) Latest available techniques;
- (c) Good practices;
- (d) Equivalency of the modified technique with the specified technique, in terms of results;
- (e) Simplicity of the modified technique in terms of adequacy of the results in determining compliance or violation; and
- (f) Other relevant factors.

- 502.4 The Mayor shall require the submission of reports on any tests he or she may require. The reports shall do the following:

- (a) Be reasonably comprehensive;

- (b) Contain all raw data obtained during the tests, including data on calibration of equipment;
- (c) Contain reasonable data on various design and operating parameters of the source and associated equipment;
- (d) Contain reasonable data on the quantities and properties of fuel raw materials consumed; and
- (e) Contain results of the tests in terms that can be compared directly to emission and other appropriate limitations in this subtitle.

- 502.5 Tests for particulate matter emissions, nitrogen oxide emissions, and sulfur oxide emissions shall be undertaken in accordance with the appropriate methods in Appendix A to Part 60 of Title 40 CFR, revised as of July 1, 1982.
- 502.6 Tests for the sulfur content of fuels shall be undertaken in accordance with the methods specified in § 60.45(f)(5) of Title 40 CFR, revised as of July 1, 1982.
- 502.7 Visible emissions may be read by a qualified observer without the aid of any devices, by an observer with the aid of hand-held charts prepared on the principle of the Ringelmann Smoke Chart, or by other reasonable devices approved by the Mayor.
- 502.8 An observer may become qualified to take visible emission readings without the aid of any devices by being certified in accordance with the appropriate provisions of item 3, Qualifications and Testing of Method 9, Appendix A to Part 60 of Title 40 CFR, revised as of July 1, 1982. That certification shall be valid for a period of one (1) year.
- 502.9 Qualified observers shall take readings in accordance with the appropriate provisions of items 2.1 Position, and 2.3 Observations, of Method 9 referred to in § 502.8. Readings by the qualified observer shall be taken momentarily at approximate intervals of fifteen (15) seconds and shall be recorded to the nearest five percent (5%) opacity; each momentary observation recorded shall represent the opacity of the emissions during the fifteen (15) second interval.
- 502.10 Continuous monitoring and recording equipment for visible emissions shall meet the performance specifications in the appropriate provisions of Performance Specification 1 in Appendix B to Part 60 of Title 40 CFR, revised as of July 1, 1982, and shall be installed, calibrated, operated, and maintained in accordance with the appropriate provisions of items 3.4 Cycling Times, 3.5 Monitor Location, 3.7 Zero and Drift, and 3.8 Span, in Appendix P to Part 51 of Title 40 CFR revised as of July 1, 1982.
- 502.11 [Repealed] D.C. Law 11-94, 42 DCR 7178 (December 29, 1995).
- 502.12 [Repealed] D.C. Law 11-94, 42 DCR 7178 (December 29, 1995).

- 502.13 Stationary sources other than those specified in §§ 502.14 and 502.17 shall be tested in accordance with the provisions of this section.
- 502.14 Stationary sources of hazardous air pollutants shall be tested in accordance with the provisions of 40 CFR, Part 61.
- 502.15 Except for sources subject to the standards of performance as set forth in 40 CFR Part 60, the Mayor may grant waivers on a case-by-case basis from the requirements of § 502.13 if, based upon a technical evaluation of the past performance of similar source types, using similar control methods, the Mayor reasonably expects the new or modified source to perform in compliance with applicable standards of performance.
- 502.16 Tests for determining the Reid Vapor Pressure of gasoline and gasoline-oxygenate blends shall be undertaken in accordance with appropriate methods as set forth in 40 CFR Part 80, Appendix E.
- 502.17 Tests for emissions of volatile organic compounds shall be undertaken in accordance with the appropriate methods in Appendix 5-1 to this chapter.
- 502.18 For the purpose of determining compliance with § 904.1, the oxygen content of gasoline shall be determined by:
- (a) Using the sampling methodologies set forth at 40 CFR Part 80, Appendix D (July 1, 1999), relating to sampling procedures for fuel volatility, or other methods approved by the EPA and the Mayor.
 - (b) Using American Society for Testing and Materials (ASTM) test method D-4815-89, or any method approved by the EPA and the Mayor.
 - (c) Using the procedures for calculating the oxygen content of gasoline described in the EPA guidance document entitled “Guidelines for Oxygenated Gasoline Credit Programs and Guidelines on Establishment of Control Periods Under Section 211(m) of the Clean Air Act as Amended”, 42 U.S.C. 7545(m), which was published in the Federal Register on October 20, 1992 (57 FR 47853), or other methods developed or approved by EPA and approved by the Mayor.

SOURCE: Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 562, 603 (February 1, 1985); as amended by: § 2 of the Gasoline Reid Vapor Pressure Requirements Act of 1990, D.C. Law 8-238 (D.C. Act 8-321) published at 38 DCR 331 (January 11, 1991); § 2 of the Air Pollution Control Act of 1984 National Ambient Air Quality Standards Attainment Amendment Act of 1993, D.C. Law 10-24 (D.C. Act 10-56) published at 40 DCR 5474, 5479 (July 30, 1993); § 14 of the Solid Waste Facility Permit Act of 1995, D.C. Law 11-94 (D.C. Act 11-177) published at 42 DCR 7172, 7178 (December 29, 1995); and Final Rulemaking published at 47 DCR 9686, 9691 (December 8, 2000).

599 DEFINITIONS AND ABBREVIATIONS

599.1 The meanings ascribed to the definitions and abbreviations appearing in §§ 199.1 and 199.2 respectively of Chapter 1 shall apply to the terms and abbreviations in this chapter.

SOURCE: Section 3 of the District of Columbia Air Pollution Control Act of 1984, D.C. Law 5-165 (D.C. Act 5-230) published at 32 DCR 565, 603 (February 1, 1985).

APPENDIX 5-1

TEST METHODS FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

<u>Source Category</u>	<u>EPA Document No.</u>	<u>Control Option</u>	<u>Test Method¹</u>
Bulk gasoline terminals	EPA-450/2-77-026	Add-on ²	Methods 25A, 25B, 2A, 2B Leak tests per methods in EPA-450/2-78-051
Bulk plants	EPA-450/2-77-035	Vapor balance system ³ equipment specifications and operating procedures	Equipment inspection per methods in EPA-450/2-77- 035, page 6-3 Leak tests per methods in EPA-450/2-78-051
Cutback asphalt	EPA-450/2-77-037	Water emulsion Emulsion solvent content	Direct observation by inspector ASTM Distillation Test D- 244
Degreasing	Not Applicable	Low volatility VOC solvents Low or no VOC content solvents	ASTM Method D-2879-86 Method 24
External floating roof tanks	EPA-450/2-78-047	Inspection, maintenance and monitoring	Per methods in EPA-450/2- 78-047, pages 5-1 to 5-4
Fixed-roof tanks	EPA-450/2-77-036	Internal floating roof ⁴ equipment specifications and maintenance requirements Add-on ²	Per methods in EPA-450/2- 77-036 page 6-2 Method 25

<u>Source Category</u>	<u>EPA Document No.</u>	<u>Control Option</u>	<u>Test Method¹</u>
Gasoline tank trucks	EPA-450/2-78-051	Pressure-vacuum test	Method 27 or methods in EPA-450/2-78-051, Appendix B
		Inspection, maintenance and monitoring	Leak tests per methods in EPA-450/2-78-051, Appendix B
Graphic arts: offset lithography	Not Applicable	Add-on ²	Method 25 or 25A
		Low Volatility VOC cleaning solutions	ASTM Method D-2879-86
		Low VOC content cleaning solutions	Method 24
		Dampening Solution	Method 415.1
Graphic arts: rotogravure and flexography	EPA-450/2-78-033	Low solvents inks, high solids inks	Method 24 or 24A
		Add-on ²	Method 25
Manufacture of high density polyethylene, polypropylene, and polystyrene	EPA-450/3-83-008	Add-on ²	Method 18, 25, or 25A
Natural gas/gasoline processing plants	EPA-450/3-83-007	Inspection, maintenance and monitoring	Method 21
Petroleum dry cleaners	EPA-450/3-82-009	Operation and maintenance	Per methods in EPA-450/3-82-009, Appendix E
		Add-on ²	Method 25
Petroleum refinery equipment leaks	EPA-450/2-78-036	Inspection, maintenance and monitoring	Method 21
Petroleum refinery vacuum producing systems, wastewater separators and process unit turnarounds	EPA-450/2-77-025	Equipment specifications and operating procedures	Per methods in EPA-450/2-77-025, page 6-2

<u>Source Category</u>	<u>EPA Document No.</u>	<u>Control Option</u>	<u>Test Method¹</u>
Perchloroethylene dry cleaners	EPA-450/2-78-050	Operation and maintenance Add-on ²	Per methods in EPA-450/2-78-050, pages 6-1 to 6-4
Pharmaceutical manufacture	EPA-450/2-78-029	Operation and maintenance Add-on ²	Per methods in EPA-450/2-78-029, page 7-2 Method 25
Rubber tire manufacture	EPA-450/2-78-030	Add-on ²	Method 25
Service stations-Stage I	Design criteria document	Vapor balance system ³ equipment specifications and operating procedures	Equipment Inspection per methods in Design Criteria Document, pages 3 to 6 Leak tests per methods in EPA-450/2-78-051
Surface coating of cans, metal coils, paper, fabric, and automobiles and light- duty trucks	EPA-450/2-77-008	Low solvent coatings Add-on ²	Method 24 Method 25 or methods in EPA-450/2-78-041
Surface coating of flatwood paneling	EPA-450/2-78-032	Low solvent coatings Add-on ²	Method 24 or methods in EPA-450/2-78-032, page 5- 1 Method 25
Surface coating of large appliances	EPA-450/2-77-034	Low solvent coatings Add-on ²	Method 24 or methods in EPA-450/2-77-034 pages 5- 1 to 5-4 Method 25 or methods in EPA-450/2-78-041

<u>Source Category</u>	<u>EPA Document No.</u>	<u>Control Option</u>	<u>Test Method¹</u>
Surface coating of magnetic wire	EPA-450/2-77-033	Add-on ²	Method 25 or methods in EPA-450/2-78-041
Surface coating of metal furniture	EPA-450/2-77-032	Low solvent coatings	Method 24 or methods in EPA-450/2-77-032, pages 5-1 to 5-5
		Add-on ²	Method 25 or methods in EPA-450/2-78-041
Surface coating of miscellaneous metal parts and products	EPA-450/2-78-015	Low solvent coatings	Method 24 or methods in EPA-450/2-78-015, page 6-1
		Add-on ²	Method 25
Synthetic organic chemicals manufacturing industry (SOCMI) equipment leaks	EPA-450/3-83-006	Inspection, maintenance and monitoring	Method 21
Synthetic organic chemicals manufacturing industry (SOCMI) air oxidation unit processes		Add-on ²	Method 18
Volatile organic liquid storage vessels		Inspection, maintenance and monitoring	

¹Methods refer to those found in Appendix A to Part 60 of Title 40 of the Code of Federal Regulations unless otherwise noted.

²Add-on refers to emission control equipment, e.g., incineration, carbon adsorption, refrigeration, refrigeration/compression/absorption, etc.

³Visual inspection except for leaks.

⁴Visual inspections only.

SOURCE: Section 2 of the Air Pollution Control Act of 1984 National Ambient Air Quality Standards Attainment Amendment Act of 1993, D.C. Law 10-24 (D.C. Act 10-56) published at 40 DCR 5474, 5480 (July 30, 1993); and Final Rulemaking published at 45 DCR 7037, 7040 (October 2, 1998).