RULE 410 RECORDKEEPING FOR VOLATILE ORGANIC COMPOUND EMISSIONS

Adopted 09-25-90 (Amended 11-03-94)

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100 **GENERAL**

- 101 APPLICABILITY: The provisions of this rule shall apply to an owner or operator of a stationary source within the District conducting operations, which include the use of fuels, adhesives, coatings, solvents, and/or graphic arts materials, when records are required to determine a District rule's applicability or source's exemption from a rule, rule compliance, or specifically as a Permit to Operate or an Authority to Construct condition.
- 102 RULES REQUIRING RECORDKEEPING: District rules requiring recordkeeping as outlined by Rule 410 include, but are not limited to, the following:
 - Rule 212 Storage of Petroleum Products
 - Rule 213 Gasoline Transfer into Stationary Storage Containers
 - Rule 215 Transfer of Gasoline into Tank Trucks, Trailers and Railroad Tank Cars at **Loading Facilities**
 - Rule 216 Organic Solvent Cleaning and Degreasing Operations
 - Rule 217 Cutback and Emulsified Asphalt Paving Materials
 - Rule 223 Metal Container Coating

DEFINITIONS 200

201 **EXEMPT COMPOUNDS:** For the purposes of this rule, exempt compounds are the following:

201.1	Methane
201.2	Carbon dioxide
201.3	Carbon monoxide
201.4	Carbonic acid
201.5	Metallic carbides or carbonates
201.6	Ammonium carbonate
201.7	1,1,1-trichloroethane
201.8	Methylene chloride
201.9	2,2-dichloro-1,1,1-trifluoroethane (HCFC-123)
201.10	2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
201.11	Trichlorofluoromethane (CFC-11)
201.12	Dichlorodifluoromethane (CFC-12)
201.13	1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113)
201.14	1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114)
201.15	Chloropentafluoroethane (CFC-115)
201.16	Pentafluoroethane (HFC-125)
201.17	1,1,2,2-tetrafluoroethane (HFC-134)
201.18	Tetrafluoroethane (HFC-134a)
201.19	1,1-dichloro-1-fluoroethane (HCFC-141b)
201.20	1-chloro-1,1-difluoroethane (HCFC-142b)
201.21	1,1,1-trifluoroethane (HFC-143a)
201.22	Chlorodifluoromethane (HCFC-22)
201.23	Trifluoromethane (HFC-23)
201.24	Difluoroethane (HFC-152a)
201.25	The following four classes of perfluorocarbon compounds:
	a Cyclic branched or linear completely fluorinated alk

- Cyclic, branched, or linear, completely fluorinated alkanes.
- Cyclic, branched, or linear, completely fluorinated ethers with no b. unsaturations.
- Cyclic, branched, or linear, completely fluorinated tertiary amines C. with no unsaturations.
- Sulfur-containing perfluorocarbons with no unsaturations and d. with sulfur bonds only to carbon and fluorine.

Perfluorocarbon compounds will be assumed to be absent from a product or process unless a manufacturer or facility operator identifies the specific individual compounds (from the broad classes of perfluorocarbon compounds) and the amounts present in the

- product or process and provides a validated test method which can be used to quantify the specific compounds.
- **202 GRAPHIC ARTS MATERIALS:** Any inks, coatings, adhesives, fountain solutions, thinners, retarders, or cleaning solutions used in printing or related coating or laminating processes.
- **LOW SOLIDS ADHESIVE, ADHESIVE PRIMER, OR STAIN:** One which has less than one pound of solids per gallon of material.
- **PERMIT UNIT:** Any article, machine, equipment, or other contrivance, or combination thereof, which may cause the issuance or control the issuance of air contaminants, and which requires a written permit pursuant to the provisions of Rule 501.
- **STATIONARY SOURCE:** Any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. "Building, structure, facility, or installation" includes all pollutant emitting activities including emissions units which:
 - 205.1 Are located on one or more contiguous or adjacent properties; and
 - 205.2 Are under the same or common ownership or operation, or which are owned or operated by entities which are under common control; and
 - 205.3 Belong to the same industrial grouping either by virtue of falling within the same two-digit standard industrial classification code, or by virtue of being part of a common industrial process, manufacturing process, or connected process involving a common raw material.
- **VOLATILE ORGANIC COMPOUND (VOC)**: Any compound which contains at least one atom of carbon, except exempt compounds.

300 STANDARDS

301 REQUIREMENTS:

- 301.1 An owner or operator of a stationary source using fuels, adhesives, coatings, solvents, and/or graphic arts materials and subject to this rule shall maintain daily records of operations for the most recent two (2) year period, and not less than the most recent five (5) years for sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM. In addition, the operating parameters of basic process equipment, any control equipment and capture system(s) shall be recorded and those records maintained as specified above.
- 301.2 The records shall be retained on the premises of the affected operation for a period of not less than two (2) years, and not less than five (5) years for sources subject to the requirements of Rule 507, FEDERAL OPERATING PERMIT PROGRAM. Said records shall be made available to the District upon request. The records shall include, but are not limited to, the following:
 - a. Each applicable District rule number pertinent to the operation for which records are being maintained;
 - b. A list of the permit units involved in the operation(s) using fuels, adhesives, coatings, solvents, and/or graphic arts materials;
 - c. The method of application and substrate type;

- d. The amount and type of fuel(s), adhesive(s), coating(s) (including catalyst and reducer), solvent(s) (including diluent, surface preparation, clean-up, and wash-up solvents), and/or graphic arts material(s) used in each permit unit or dispensing station;
- e. For each adhesive, coating (including catalyst and reducer), solvent, and/or graphic arts material; the material density; VOC content in percent by weight of material, less water and exempt compounds; exempt compounds in percent by weight of material; solids content in percent by volume, gallons per gallon of material, or liter per liter of material; constituent composition in percent by weight of material; and pounds of VOC emitted per volume of solids. Data shall be recorded for the material(s) as applied;
- f. For fuels, a record of the fuel specification which may include, but is not limited to: constituent analyses, ultimate analyses, and physical properties;
- g. The composition and amount of diluent, surface preparation, clean-up, or wash-up solvent used per day and the VOC content of each including the amount used of exempt compounds. In addition, the method of application (wipe, dipping in a vat, spray, etc.), the substrate the solvent is applied to (metal, plastic, etc.), and the purpose of use (cleanup of equipment or parts, surface preparation, etc.) should also be recorded;
- h. Where applicable, the initial boiling point of solvents used as surface cleaners;
- i. Oven temperatures (for coating operations); and
- j. Operating parameters of basic process equipment, control devices, and the capture system, which effect or have the potential to effect the quantity, extent, or characteristics of emitted pollutants.

302 CALCULATING VOC CONTENT:

- 302.1 VOC content (less water and exempt compounds) for paint, varnish, adhesive, lacquer, non-solvent-borne inks, or related surface coatings shall be calculated using EPA Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coatings, Code of Federal Regulations Title 40, Part 60, Appendix A).
- 302.2 The test method shall be documented. The VOC content of any material applicable under this rule may be supplied by a Material Safety Data Sheet (MSDS) or data sheet provided the test method described above is used and specified on the MSDS or data sheet.
- 302.3 VOC content and density of solvent-borne (solvent reducible) printing inks or related coatings shall be determined by EPA Reference Method 24A (Determination of Volatile Matter Content and Density of Printing Inks and Related Coatings, Code of Federal Regulations Title 40, Part 60, Appendix A).
- **303 INITIAL BOILING POINT:** The Initial Boiling Point for surface preparation and cleanup solvents shall be determined by the current ASTM 1078-78.

400 ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE: Provisions of this rule shall become effective upon the date of its adoption.

