2.109 Fabric and Vinyl Coating (All Sources)

2.109.1 Applicability and Designation of Affected Facility

(a) The affected facility to which the provisions of this source category apply is each fabric or vinyl coating operation. Facilities subject to Federal New Source Performance Standards are also subject to these provisions as well as the provisions of Section 2.59.

(b) For facilities controlled by a solvent recovery emission control device, any requirements for the monitoring of operation will not apply until performance specifications under Appendix B for the continuous monitoring system have been published. After such publication, any provisions (e.g., permit condition) will apply to each affected facility under paragraph (a) of this section. Facilities controlled by a solvent recovery emission control device that become subject to emission standards or regulations prior to publication of performance specifications shall conduct performance test in accordance with Section 1.4(b), as required, after performance specifications are promulgated.

2.109.2 Test Methods and Procedures

(a) Reference methods in Appendix A, except as provided under Section 1.2, shall be used to determine compliance as follows:

(1) Method 24 for analysis of inks. If nonphotochemically reactive solvents are used in the inks, standard gas chromatographic techniques may be used to identify and quantify these solvents. Upon approval by the Director, the results of Method 24 may be adjusted to subtract these solvents from the measured VOC content.

(2) Method 25 or 25A for VOC concentrations of each effluent stream entering and exiting a non-combustion solvent removal device (e.g., carbon adsorption) and each effluent gas stream emitted directly to the atmosphere and Method 25 for VOC concentrations of each effluent stream entering or exiting a combustion control device (e.g., incinerator, boiler).

For Method 25 or 25A, the sampling time for each run shall be at least 1 hour. The minimum sampling volume shall be 0.003 dscm, except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Director.

(3) Method 1 for sample and velocity traverses.

(4) Method 2 for velocity and volumetric flow rate.

(5) Method 3 for gas analysis.

(6) Method 4 for stack gas moisture.

(b) To demonstrate compliance with low solvent content coating technology, procedures similar to those of Section 2.59.3(b) and (c) shall be used as specified by the Director using the equations of Section 2.33.3(d) to determine daily (or other averaging period as specified) volume-weighted average emissions of VOC in units of pounds VOC per gallon excluding water.

(c) When a control device or system is used, the procedures of Section 2.59.3(d)(1)(2)(3) and (4) and the equations only of 2.59.3(d)(5) shall be used unless an alternate method or procedure is
approved by the Director.

2.109.3 Monitoring of Operations and Recordkeeping Requirements

When required by the Director, to install and maintain a monitoring system to continuously measure and record the VOC concentration of the exhaust vent stream from a control device, the owner or operator shall comply with the following requirements:

(a) The owner or operator of an affected facility controlled by a solvent recovery emission control device shall install, calibrate, operate, and maintain a monitoring system which continuously measures and records the VOC concentration of the exhaust vent stream from the control device and shall comply with the following requirements:

(1) The continuous monitoring system shall be installed in a location that is representative of the VOC concentration in the exhaust vent, at least two equivalent stack diameters form the exhaust point, and protected from interferences due to wind, weather, or other processes.

(2) During the performance test, the owner or operator shall determine and record the average exhaust vent VOC concentration in parts per million by volume. After the performance test, the owner or operator shall determine and record, in addition to the record made by the continuous monitoring device, the average exhaust vent VOC concentration for each 3-hour clock period of printing operation when the average concentration is greater than 50 ppm and more than 20 percent greater than the average concentration value demonstrated during the most recent performance test.

(b) The owner or operator of an affected facility controlled by a thermal incineration emission control device shall install, calibrate, operate, and maintain a monitoring device that continuously measures and records the temperature of the control device exhaust gases and shall comply with the following requirements:

(1) The continuous monitoring device shall be calibrated annually and have an accuracy of ±0.75 percent of the temperature being measured or ±2.5°C, whichever is greater.

(2) During the performance test, the owner or operator shall determine and record the average temperature of the control device exhaust gases. After the performance test, the owner or operator shall determine and record, in addition to the record made by the continuous monitoring device, the average temperature for each 3-hour clock period of printing operation when the average temperature of the exhaust gases is more than 28°C below the average temperature demonstrated during the most recent performance test.

(c) The owner or operator of an affected facility controlled by a catalytic incineration emission control device shall install, calibrate, operate, and maintain monitoring devices that continuously measure and record the gas temperatures both upstream and downstream of the catalyst bed and shall comply with the following requirements:

(1) Each continuous monitoring device shall be calibrated annually and have an accuracy of ±0.75 percent of the temperature being measured or ±2.5°C, whichever is greater.

(2) During the performance test, the owner or operator shall determine and record the average gas temperature both upstream and downstream of the catalyst bed. After the performance test, the owner or operator shall determine and record, in addition to the
record made by the continuous monitoring device, the average temperatures for each 3-hour clock period of printing operation when the average temperature of the gas stream before the catalyst bed is more than 28°C below the average temperature demonstrated during the most recent performance test or the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference of the device during the most recent performance test.