Subpart WW-Standards of Performance for the Beverage Can Surface Coating Industry

Applicability and designation of affected facility - §60.490

Source	All Emissions
General	1.) Facilities in beverage can surface coating lines: each exterior base coat operation, each overvarnish coating operation, and each inside spray coating operation. 2.) Facilities which are identified in paragraph (1) of this section and commences construction, modification, or reconstruction after November 26, 1980.

Standards for volatile organic compounds - §60.492

Source	All Emissions
General	1.) Facility shall not emit VOC's into the atmosphere that exceed 0.29 kilogram of VOC per litre of coating solids from each two-piece can exterior base coating operation, except clear base coat. 2.) Facility shall not emit VOC's into the atmosphere that exceed 0.46 kilogram of VOC per litre of coating solids from each two-piece can clear base coating operation and from each overvarnish coating operation; and 3.) Facility shall not emit VOC's into the atmosphere that exceed 0.89 kilogram of VOC per litre of coating solids from each two-piece can inside spray coating operation.

Performance test and compliance provisions - §60.493

Source	All Emissions
General	1.) Section 60.8(d) does not apply to monthly performance tests and §60.8(f) does not apply to the performance test procedures required by this subpart. 2.) Facility shall conduct an initial performance test as required under §60.8(a) and thereafter a performance test each calendar month for each affected facility.

Facility that does not use a capture system and a control device	1.) Facility shall determine the VOC- content of the coatings from formulation data supplied by the manufacturer of the coating or by an analysis of each coating, as received, using Reference Method 24. 2.) The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine the VOC content of coatings using Reference Method 24 or an equivalent or alternative method. 3.) The owner or operator shall determine from company records the volume of coating and the mass of VOC-solvent added to coatings. 4.) If a common coating distribution system serves more than one affected facility or serves both affected and exiting facilities, the owner or operator shall estimate the volume of coating used at each facility by using the average dry weight of coating, number of cans, and size of cans being processed by each affected and existing facility or by other procedures acceptable to the Administrator. 5.) Facility shall calculate the volume-weighted average of the total mass of VOC per volume of coating solids used during the calendar month for each affected facility, except as provided under paragraph (b)(1)(iv) of this section. The volume-weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the procedures found in §60.493 (b) (1) (i). 6.) Facility shall calculate the volume-weighted average of VOC emissions discharged to the atmosphere (N) during the calendar month for the affected facility by the equation found in §60.493 (b) (1) (ii). 7.) Facilities where the value of the volume-weighted average of mass of VOC per volume of solids discharged to the atmosphere (N) is equal to or less than the applicable emission limit specified under §60.492, the affected facility is in compliance. 8.) If each individual coating used by an affected facility has a VOC content equal to or less than the limit specified under §60.492, the affected facility is in compliance provided no VOC-solvents are added to the coating during distribution or application.
Facility that uses a capture system and a control device that destroys VOC (e.g., incinerator)	1.) Facility shall determine the overall reduction efficiency (R) for the capture system and control device 2.) Facility shall calculate the volume-weighted average of the total mass of VOC per volume of coating solids (G) used during the calendar month for the affected facility using equations (1), (2), and (3) of §60.493 (b) (2) (ii). 3.) Facility shall calculate the volume-weighted average of VOC emissions discharged to the atmosphere (N) during the calendar month by the equation found in §60.493 (b) (2) (iii). 4.) If the volume-weighted average of mass of VOC emitted to the atmosphere for the calendar month (N) is equal to or less than the applicable emission limit specified under §60.492, the affected facility is in compliance.
Facility that uses a capture system and a control device that recovers the VOC (e.g., carbon adsorber)	1.) Facility shall calculate the volume-weighted average of the total mass of VOC per unit volume of coating solids applied (G) used during the calendar month for the affected facility using equations (1), (2), and (3). 2.) Facility shall calculate the total mass of VOC recovered (Mr) during each calendar month using the equation found in §60.493 (b) (3) (ii): 3.) Facility shall calculate overall reduction efficiency of the control device (R) for the calendar month for the affected facility using the equation found in §60.493 (b) (3) (iii). 4.) Facility shall calculate the volume-weighted average mass of VOC discharged to the atmosphere (N) for the calendar month for the afffected facility using equation (8). 5.) If the weighted average of VOC emitted to the atmosphere for the calendar month (N) is equal to or less than the applicable emission limit specified under §60.492, the affected facility is in compliance.

Monitoring of emissions and operations - §60.494

Source	All emissions
General	Facility that uses a capture system and an incinerator to comply with the emission limits specified under §60.492 shall install, calibrate, maintain, and operate temperature measurement devices as prescribed below. 1.) Where thermal incineration is used, a temperature measurement device shall be installed in the firebox. Where catalytic incineration is used, temperature measurement devices shall be installed in the gas stream immediately before and after the catalyst bed. 2.) Each temperature measurement device shall be installed, calibrated, and maintained according to the manufacturer's specifications. The device shall have an accuracy the greater of ±0.75 percent of the temperature being measured expressed in degrees Celsius or ±2.5° C. 3.) Each temperature measurement device shall be equipped with a recording device so that a permanent continuous record is produced.

Reporting and recordkeeping requirements - §60.495

Source	All emissions
General	1.) Following the initial performance test, each facility shall identify, record, and submit quarterly reports to the Administrator of each instance in which the volume-weighted average of the total mass of VOC per volume of coating solids, after the control device, if capture devices and control systems are used, is greater than the limit specified under §60.492. If no such instances occur during a particular quarter, a report stating this shall be submitted to the Administrator semiannually. 2.) Facilities subject to the provisions of this subpart shall maintain at the source, for a period of at least 2 years, records of all data and calculations used to determine VOC emissions from each affected facility in the initial and monthly performance tests. 3.) Where compliance is achieved through the use of a solvent recovery system, the owner or operator shall maintain at the source daily records of the amount of solvent recovered by the system for each affected facility.
Facilities where only coatings which individually have a VOC content equal to or less than the limits specified under §60.492 are used, and no VOC is added to the coating during the application or distribution process	Facility shall provide a list of the coatings used for each affected facility and the VOC content of each coating calculated from data determined using Reference Method 24 or supplies by the manufacturers of the coatings as required in the initial performance test.

Facilities where one or more coatings which individually have a VOC content greater than the limits specified under §60.492 are used or where VOC are added or used in the coating process	Facility shall report for each affected facility the volume-weighted average of the total mass of VOC per volume of coating solids as required in the initial performance test.
Facilities where compliance is achieved through the use of incineration	1.) Facility shall include in the initial performance test required under §60.8(a) the combustion temperature (or the gas temperature upstream and downstream of the catalyst bed), the total mass of VOC per volume of coating solids before and after the incinerator, capture efficiency, and the destruction efficiency of the incinerator used to attain compliance with the applicable emission limit specified under §60.492. 2.) Facility shall also include a description of the method used to establish the amount of VOC captured by the capture system and sent to the control device.
Facility uses thermal incineration to acheive compliance	1.) Facility shall, following the initial performance test identify, record, and submit at the frequency specified in §60.7(c) the information found in §60.495 (c) (1). 2.) For thermal and catalytic incinerators, if no such periods as described in the paragraph of this section occur, the facility shall state this in the report. 3.) Facility shall maintain, at the source, daily records of the incinerator combustion chamber temperature.
Facility uses catalytic incineration to acheive compliance	1.) Facility shall, following the initial performance test identify, record, and submit at the frequency specified in §60.7(c) the information found in §60.495 (c) (2). 2.) For thermal and catalytic incinerators, if no such periods as described in the paragraph of this section occur, the facility shall state this in the report. 3.) Facility shall maintain at the source daily records of the gas temperature, both upstream and downstream of the incinerator catalyst bed.

Test methods and procedures - §60.496

Source	All Emissions

General	1.) Facility shall use the reference methods in appendix A to this part, except as provided in §60.8, to conduct performance tests. a.) Reference Method 24, an equivalent or alternative method proved by the Administrator, or manufacturers formulation for data from which the VOC content of the coatings used for each affected facility can be calculated. In the event of dispute, Reference Method 24 shall be the referee method. When VOC content of waterborne coatings, determined from data generated by Reference Method 24, is used to determine compliance of affected facilities, the results of the Method 24 analysis shall be adjusted as described in section 4.4 of Method 24. b.) Reference Method 25 or an equivalent or alternative method for the determination of the VOC concentration in the effluent gas entering and leaving the control device for each stack equipped with an emission control device. The owner or operator shall notify the Administrator 30 days in advance of any State test using Reference Method 25. The following reference methods are to be used in conjunction with Reference Method 25: (i) Method 1 for sample and velocity traverses, (ii) Method 2 for velocity and volumetric flow rate, (iii) Method 3 for gas analysis, and (iv) Method 4 for stack gas moisture. 2.) For Reference Method 24, the coating sample must be a 1-litre sample collected in a 1-litre container at a point where the sample will be representative of the coating material. 3.) For Reference Method 25, the sampling time for each of three runs must be at least 1 hour. The minimum sample volume must 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 Administrator. The Administrator will approve the sampling of representative stacks on a case-by-case basis if the owner or operator can demonstrate to the satisfaction of the Administrator that the testing of representative stacks would yield results comparable to those that would be obtained by testing all stacks.