

such capture system or add-on control device, you are not required to comply with the requirements of §§ 63.3093, 63.3100, 63.3110, 63.3120, 63.3130, 63.3131, and 63.3160 through 63.3168 with regard to notification, reporting, record-keeping, performance tests, monitoring, operating parameters, capture efficiency, add-on control device efficiency, destruction efficiency, or removal efficiency. If, at a later date, you decide to take any such capture system or add-on control device into account when demonstrating compliance with the emission limitations, then at that time you must comply with the requirements of §§ 63.3093, 63.3100, 63.3110, 63.3120, 63.3130, 63.3131, and 63.3160 through 63.3168 with regard to notification, reporting, record-keeping, performance tests, monitoring, operating parameters, capture efficiency, add-on control device efficiency, destruction efficiency, and removal efficiency, as applicable, for that capture system or add-on control device.

[72 FR 20236, Apr. 24, 2007]

#### OTHER REQUIREMENTS AND INFORMATION

##### § 63.3175 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, EPA, or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:

(1) Approval of alternatives to the work practice standards in § 63.3094 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

##### § 63.3176 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in the General Provisions of this part, and in this section as follows:

*Add-on control device* means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

*Add-on control device efficiency* means the ratio of the emissions collected or destroyed by an add-on air pollution control device to the total emissions that are introduced into the control device, expressed as a percentage.

*Adhesive* means any chemical substance that is applied for the purpose of bonding two surfaces together.

*Adhesive and sealer material* means adhesives, sealers and thinners added to adhesives or sealers.

*Anti-chip coating* means a specialty type of coating designed to reduce stone chipping damage. Anti-chip coating may be applied to broad areas of the vehicle or to selected vehicle surfaces that are most vulnerable to impingement by stones and other road debris. Anti-chip coating is typically applied after the *electrodeposition primer* and before the *topcoat*. Anti-chip coating is a type of *primer-surfacer*.

*Automobile* means a motor vehicle designed to carry up to eight passengers, excluding vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property. See also *Light-duty truck*.

*Automobile and light-duty truck assembly plant* means a facility which assembles automobiles or light-duty trucks, including coating facilities and processes.

*Bake oven air seal* means an entry or entry vestibule to or an exit or exit vestibule from a bake oven which isolates the bake oven from the area immediately preceding (for an entry or entry vestibule) or immediately following (for an exit or exit vestibule) the bake oven. No significant VOC generating activity takes place in a bake oven air seal. Fresh air is supplied into a bake oven air seal and is then directed in part into the bake oven and in part into the area immediately preceding or immediately following the bake oven. All types of bake ovens, including ovens associated with spray booths and electrodeposition primer bake ovens, may have bake oven air seals.

*Basecoat/clearcoat* means a topcoat system applied to exterior and selected interior vehicle surfaces primarily to provide an aesthetically pleasing appearance and acceptable durability performance. It consists of a layer of pigmented basecoat color coating, followed directly by a layer of a clear or semitransparent coating. It may include multiple layers of color coats or tinted clear materials.

*Blackout coating* means a type of specialty coating applied on selected vehicle surfaces (including areas of the engine compartment visible through the grill, and window and pillar trim) to provide a cosmetic appearance. Typically black or dark gray color. Blackout coating may be included in either the primer-surfacer or topcoat operations.

*Body part* means exterior parts such as hoods, fenders, doors, roof, quarter panels, decklids, tail gates, and cargo beds. Body parts were traditionally made of sheet metal, but now are also made of plastic. Bumpers, fascia, and cladding are not body parts.

*Capture device* means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

*Capture efficiency or capture system efficiency* means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

*Capture system* means one or more capture devices intended to collect

emissions generated by a coating operation in the use of coatings, both at the point of application and at subsequent points where emissions from the coatings occur, such as flash-off, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

*Catalytic oxidizer* means a device for oxidizing pollutants or waste materials via flame and heat incorporating a catalyst to aid the combustion at lower operating temperature.

*Chip resistant edge primer* means an *anti-chip coating* applied to the leading edge of parts such as the hood or roof.

*Cleaning material* means a solvent used to remove contaminants and other materials such as dirt, grease, oil, and dried (e.g., depainting) or wet coating from a substrate before or after coating application; or from equipment associated with a coating operation, such as spray booths, spray guns, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

*Coating* means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, caulks, inks, adhesives, primers, deadeners, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances are not considered coatings for the purposes of this subpart.

*Coating operation* means equipment used to apply coating to a substrate (coating application) and to dry or cure the coating after application. A single coating operation always includes at least the point at which a coating is applied and all subsequent points in the affected source where organic HAP emissions from that coating occur. There may be multiple coating operations in an affected source. Coating application with hand-held nonrefillable aerosol containers, touchup bottles, touchup markers, marking pens, or pinstriping equipment is not a coating operation for the purposes of this subpart. The application of temporary materials such as protective oils and

“travel waxes” that are designed to be removed from the vehicle before it is delivered to a retail purchaser is not a coating operation for the purposes of this subpart.

*Coating solids* means the nonvolatile portion of the coating.

*Container* means a receptacle, such as a can, vessel, tote, or tank, in which coatings, solvents or cleaning materials are held, stored, mixed, or carried.

*Continuous parameter monitoring system (CPMS)* means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart; used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

*Controlled coating operation* means a coating operation from which some or all of the organic HAP emissions are routed through a *capture system* and an *add-on control device* which are taken into account when demonstrating compliance with an emission limitation in this subpart.

*Day tank* means tank with agitation and pumping system used for mixing and continuous circulation of coatings from the paint storage area to the spray booth area of the paint shop.

*Deadener* means a specialty coating applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

*Deadener material* means deadener and thinner added to deadener.

*Deposited solids* means the coating solids which remain on the substrate or object being painted.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or fails to meet any emission limit or operating limit or work practice standard in this subpart during

startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart. A deviation is not always a violation.

*Electrodeposition primer or electrocoating primer* means a process of applying a protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank. Also referred to as E-Coat, Uni-Prime, and ELPO Primer.

*Emission limitation* means an emission limit, operating limit, or work practice standard.

*Final repair* means the operations performed and coating(s) applied to completely-assembled motor vehicles or to parts that are not yet on a completely assembled motor vehicle to correct damage or imperfections in the coating. The curing of the coatings applied in these operations is accomplished at a lower temperature than that used for curing primer-surfacer and topcoat. This lower temperature cure avoids the need to send parts that are not yet on a completely assembled vehicle through the same type of curing process used for primer-surfacer and topcoat and is necessary to protect heat sensitive components on completely assembled motor vehicles.

*Flash-off area* means the portion of a coating process between the coating application station and the next coating application station or drying oven where solvent begins to evaporate from the coated vehicle.

*Glass bonding adhesive* means an adhesive used to bond windshield or other glass to an automobile or light-duty truck body.

*Glass bonding primer* means a primer applied to windshield or other glass, or to body openings to prepare the glass or body openings for the application of glass bonding adhesive, or the installation of adhesive bonded glass.

*Guide coat* means *Primer-surfacer*.

*In-line repair* means the operation performed and coating(s) applied to correct damage or imperfections in the

topcoat on parts that are not yet on a completely assembled motor vehicle. The curing of the coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously applied topcoat. Also referred to as high bake repair or high bake reprocess. In-line repair is considered part of the topcoat operation.

*Light-duty truck* means vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property with gross vehicle weight rating of 8,500 lbs or less.

*Lower body anti-chip coating* means an anti-chip coating applied to lower body surfaces such as rocker panels, valence panels, lower portions of doors, or lower portions of fenders.

*Manufacturer's formulation data* means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §§ 63.3151 and 63.3161. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

*Mass fraction of organic HAP* means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

*Month* means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in record-keeping when data are based on a business accounting period.

*Organic HAP content* means the mass of organic HAP per mass of coating material.

*Other motor vehicle* means a self-propelled vehicle designed for transporting persons or property on a street or highway that has a gross vehicle weight rating over 8,500 pounds. You may choose to make the coating of other motor vehicles subject to this subpart pursuant to § 63.3082(c).

*Other motor vehicle assembly plant* means a facility which assembles other motor vehicles, including coating facilities and processes.

*Paint line* means a set of coating operations which includes a topcoat operation and, if present, includes electrodeposition primer, primer-surfacer, final repair, glass bonding primer and glass bonding adhesive operations in which the same new automobile or new light-duty truck bodies, or body parts for new automobiles, or new light-duty trucks are coated. The most typical paint line consists of a set of electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations in which the same new automobile or new light-duty truck bodies are coated.

*Paint shop* means the collection of all areas at the facility in which new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks are phosphated and coated (including application, flash-off, drying and curing of electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, glass bonding adhesive, deadener, adhesives and sealers); all coating operations added to the affected source pursuant to § 63.3082(c); all areas at the facility in which substrates or equipment are cleaned relating to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to § 63.3082(c); and all areas at the facility used for storage, mixing, conveying and waste handling of coatings, thinners and cleaning materials related to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to § 63.3082(c). If there is no application of topcoat to new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks at the facility, then for purposes of this subpart the facility does not have a paint shop.

*Permanent total enclosure (PTE)* means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases

from the enclosure to an add-on control device.

*Plastic or composites molding facility* means a facility where the purchase cost of capital equipment used for plastic or composites molding, including presses, tooling, and associated material processing and handling equipment, is greater than the purchase cost of capital equipment used for the surface coating of new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks.

*Primer-surfacer* means an intermediate protective coating applied on the *electrodeposition primer* and under the *topcoat*. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer may also be called *guide coat* or *surfacer*.

*Anti-chip coating* is a type of primer-surfacer.

*Purge/clean operation* means the process of flushing paint out and cleaning the spray lines when changing colors or to remove undesired material. It includes use of air and solvents to clean the lines.

*Purge capture* means the capture of purge solvent and materials into a closed collection system immediately after purging the system. It is used to prevent the release of organic HAP emissions and includes the disposal of the captured purge material.

*Purge material* means the coating and associated cleaning solvent materials expelled from the spray system during the process of cleaning the spray lines and applicators when color-changing or to maintain the cleanliness of the spray system.

*Protective oil* means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

*Research or laboratory operations* means surface coating for which the primary purpose is research and development of new processes and products, that is conducted under the close supervision of technically trained per-

sonnel, and that is not part of the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Sealer* means a high solids, high viscosity material, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating. The primary purpose of sealers is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. Also referred to as sealants.

*Spray booth* means a ventilated structure housing automatic and/or manual spray application equipment for coating operations. Includes facilities for the capture and entrapment of particulate overspray.

*Spray booth air seal* means an entry or entry vestibule to or exit or exit vestibule from a spray booth which isolates the spray booth from the area immediately preceding (for an entry or entry vestibule) or immediately following (for an exit or exit vestibule) the spray booth. No coating application or other VOC generating activity takes place in a spray booth air seal. Fresh air is supplied into a spray booth air seal and is then directed in part into the spray booth and in part into the area immediately preceding or immediately following the spray booth.

*Startup, initial* means the first time equipment is used in a facility to produce a salable product.

*Surface preparation* means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called "depainting."

*Surfacer* means *Primer-surfacer*.

*Tack-wipe* means solvent impregnated cloth used to remove dust from surfaces prior to application of coatings.

*Temporary total enclosure* means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

**Environmental Protection Agency**

**Pt. 63, Subpt. IIII, Table 1**

*Thermal oxidizer* means a device for oxidizing air pollutants or waste materials via flame and heat.

*Thinner* means an organic solvent that is added to a coating after the coating is received from the supplier.

*Topcoat* means the final coating system applied to provide the final color and/or a protective finish. The topcoat may be a monocoat color or basecoat/clearcoat system. In-line repair and two-tone are part of topcoat.

*Total volatile hydrocarbon (TVH)* means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

*Touchup bottle* means a coating container with a volume of 0.25 liter or less used with a brush or other non-atomizing applicator.

*Transfer efficiency* means the ratio of the amount of coating solids deposited

onto the surface of the object to the total amount of coating solids sprayed while applying the coating to the object.

*Uncontrolled coating operation* means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

*Underbody anti-chip coating* means an anti-chip coating applied to the underbody or wheel wells primarily for the purpose of protecting these areas of the vehicle from stone chipping.

*Volatile organic compound (VOC)* means any compound defined as VOC in 40 CFR 51.100(s).

*Volume fraction of coating solids* means the ratio of the volume of coating solids (also known as volume of nonvolatiles) to the volume of coating; liters of coating solids per liter of coating.

[69 FR 22623, Apr. 26, 2004, as amended at 71 FR 76927, Dec. 22, 2006; 72 FR 20236, Apr. 24, 2007]

TABLE 1 TO SUBPART IIII OF PART 63—OPERATING LIMITS FOR CAPTURE SYSTEMS AND ADD-ON CONTROL DEVICES

If you are required to comply with operating limits by §63.3093, you must comply with the applicable operating limits in the following table

For the following device . . .	You must meet the following operating limit . . .	And you must demonstrate continuous compliance with the operating limit by
1. Thermal oxidizer .....	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.3167(a).	i. Collecting the combustion temperature data according to §63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above temperature limit.
2. Catalytic oxidizer .....	a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to §63.3167(b); and either.  b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.3167(b)(2); or.	i. Collecting the temperature data temperature according to §63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit.  i. Collecting the temperature data according to §63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit; or

Pt. 63, Subpt. III, Table 1

40 CFR Ch. I (7-1-07 Edition)

For the following device . . . .	You must meet the following operating limit . . . .	And you must demonstrate continuous compliance with the operating limit by
	<p>c. Develop and implement an inspection and maintenance plan according to § 63.3167(b)(4).</p>	<p>i. Maintaining an up-to-date inspection maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by § 63.3167(b)(4), you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.</p>
<p>3. Regenerative carbon adsorber.</p>	<p>a. The total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to § 63.3167(c).</p> <p>b. The temperature of the carbon bed after completing each regeneration and any cooling cycle must not exceed the carbon bed temperature limit established according to § 63.3167(c).</p>	<p>i. Measuring the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle according to § 63.3168(d); and</p> <p>ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit.</p> <p>i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to § 63.3168(d); and</p> <p>ii. Operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.</p>
<p>4. Condenser .....</p>	<p>a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to § 63.3167(d).</p>	<p>i. Collecting the condenser outlet (product side) gas temperature according to § 63.3168(e);</p> <p>ii. Reducing the data to 3-hour block averages; and</p> <p>iii. Maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit.</p>
<p>5. Concentrators, including zeolite wheels and rotary carbon adsorbers.</p>	<p>a. The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to § 63.3167(e).</p>	<p>i. Collecting the temperature data according to § 63.3168(f);</p> <p>ii. Reducing the data to 3-hour block averages; and</p> <p>iii. maintaining the 3-hour average temperature at or above the temperature limit.</p>
<p>6. Emission capture system that is a PTE.</p>	<p>a. The direction of the air flow at all times must be into the enclosure; and either.</p> <p>b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or.</p> <p>c. The pressure drop across the enclosure must be at least 0.007 inch water, as established in Method 204 of appendix M to 40 CFR part 51.</p>	<p>i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to § 63.3168(g)(1) or the pressure drop across the enclosure according to § 63.3168(g)(2); and</p> <p>ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.</p>
<p>7. Emission capture system that is not a PTE.</p>	<p>a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to § 63.3167(f). This applies only to capture devices that are not part of a PTE that meets the criteria of § 63.3165(a) and that are not capturing emissions from a downdraft spray booth or from a flashoff area or bake oven associated with a downdraft spray booth.</p>	<p>i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to § 63.3168(g);</p> <p>ii. Reducing the data to 3-hour block averages; and</p> <p>iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.</p>

[69 FR 22623, Apr. 26, 2004, as amended at 72 FR 20236, Apr. 24, 2007]

**Environmental Protection Agency**

**Pt. 63, Subpt. IIII, Table 2**

**TABLE 2 TO SUBPART IIII OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIII OF PART 63**

You must comply with the applicable General Provisions requirements according to the following table

Citation	Subject	Applicable to subpart IIII	Explanation
§ 63.1(a)(1)–(12)	General Applicability	Yes.	
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart IIII is also specified in § 63.3081.
§ 63.1(c)(1)	Applicability After Standard Established.	Yes.	
§ 63.1(c)(2)	Applicability of Permit Program for Area Sources.	No	Area sources are not subject to subpart IIII.
§ 63.1(c)(5)	Extensions and Notifications	Yes.	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes.	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.3176.
§ 63.3(a)–(c)	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes.	
§ 63.4(b)–(c)	Circumvention/Fragmentation	Yes.	
§ 63.5(a)	Preconstruction Review Applicability.	Yes.	
§ 63.5(b)(1)–(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes.	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e)	Approval of Construction/Reconstruction.	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes.	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes.	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	Section 63.3083 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources.	Yes	Section 63.3083 specifies the compliance dates.
§ 63.6(e)(1)–(2)	Operation and Maintenance	Yes.	
§ 63.6(e)(3)	SSMP	Yes	Only sources using an add-on control device to comply with the standard must complete SSMP.
§ 63.6(f)(1)	Compliance Except During Start-up, Shutdown, and Malfunction.	Yes	Applies only to sources using an add-on control device to comply with the standards.
§ 63.6(f)(2)–(3)	Methods for Determining Compliance.	Yes.	
§ 63.6(g)(1)–(3)	Use of an Alternative Standard	Yes.	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards.	No	Subpart IIII does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)	Extension of Compliance	Yes.	
63.6(j)	Presidential Compliance Exemption.	Yes.	
§ 63.7(a)(1)	Performance Test Requirements—Applicability.	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3164 and 63.3166.



Pt. 63, Subpt. III, Table 2

40 CFR Ch. I (7-1-07 Edition)

Citation	Subject	Applicable to subpart III	Explanation
§ 63.7(a)(2)	Performance Test Requirements—Dates.	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.3160 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required By the Administrator.	Yes.	
§ 63.7(b)–(e)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing Conditions During Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	Applies to all test methods except those used to determine capture system efficiency.
§ 63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§ 63.8(a)(1)–(3)	Monitoring Requirements—Applicability.	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for monitoring are specified in § 63.3168.
§ 63.8(a)(4)	Additional Monitoring Requirements.	No	Subpart III does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes.	
§ 63.8(c)(1)–(3)	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for CMS operations and maintenance are specified in § 63.3168.
§ 63.8(c)(4)	CMS	No	Section 63.3168 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply with the standards.
§ 63.89(c)(5)	COMS	No	Subpart III does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.3168 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply with the standards.
§ 63.8(c)(7)	CMS Out-of-Control Periods	No	
§ 63.8(c)(8)	CMS Out-of-Control Periods Reporting.	No	Section 63.3120 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart III does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method.	Yes.	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test.	No	Subpart III does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)–(5)	Data Reduction	No	Sections 63.3167 and 63.3168 specify monitoring data reduction.

Environmental Protection Agency

Pt. 63, Subpt. IIII, Table 2

Citation	Subject	Applicable to subpart IIII	Explanation
§ 63.9(a)–(d)	Notification Requirements	Yes.	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart IIII does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS.	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.9(h)	Notification of Compliance Status.	Yes	Section 63.3110 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines.	Yes	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information.	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements.	Yes	Additional requirements are specified in §§63.3130 and 63.3131.
§ 63.10(b)(2)(i)–(v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS.	Yes	Requirements for startup, shutdown, and malfunction records only apply to capture systems and add-on control devices used to comply with the standards.
§ 63.10(b)(2)(vi)–(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Records	Yes.	
§ 63.10(b)(2)(xiii)	Records	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2)(xiv)	Records	Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(7)–(8)	Records	No	The same records are required in §63.3120(a)(6).
§ 63.10(c)(9)–(15)	Records	Yes	
§ 63.10(d)(1)	General Reporting Requirements.	Yes	Additional requirements are specified in § 63.3120.
§ 63.10(d)(2)	Report of Performance Test Results.	Yes	Additional requirements are specified in § 63.3120(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart IIII does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes.	
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes	Applies only to capture systems and add-on control devices used to comply with the standards.
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	No	Section 63.3120(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart IIII does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver.	Yes	
§ 63.11	Control Device Requirements/Flares.	No	Subpart IIII does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13	Addresses	Yes.	

Citation	Subject	Applicable to subpart IIII	Explanation
§ 63.14 .....	Incorporation by Reference .....	Yes.	
§ 63.15 .....	Availability of Information/Confidentiality.	Yes.	

TABLE 3 TO SUBPART IIII OF PART 63—DEFAULT ORGANIC HAP MASS FRACTION FOR SOLVENTS AND SOLVENT BLENDS

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data

Solvent/solvent blend	CAS. No.	Average organic HAP mass fraction	Typical organic HAP, percent by mass
1. Toluene .....	108-88-3	1.0	Toluene.
2. Xylene(s) .....	1330-20-7	1.0	Xylenes, ethylbenzene.
3. Hexane .....	110-54-3	0.5	n-hexane.
4. n-Hexane .....	110-54-3	1.0	n-hexane.
5. Ethylbenzene .....	100-41-4	1.0	Ethylbenzene.
6. Aliphatic 140 .....	.....	0	None.
7. Aromatic 100 .....	.....	0.02	1% xylene, 1% cumene.
8. Aromatic 150 .....	.....	0.09	Naphthalene.
9. Aromatic naphtha .....	64742-95-6	0.02	1% xylene, 1% cumene.
10. Aromatic solvent .....	64742-94-5	0.1	Naphthalene.
11. Exempt mineral spirits .....	8032-32-4	0	None.
12. Lignoines (VM & P) .....	8032-32-4	0	None.
13. Lactol spirits .....	64742-89-6	0.15	Toluene.
14. Low aromatic white spirit .....	64742-82-1	0	None.
15. Mineral spirits .....	64742-88-7	0.01	Xylenes.
16. Hydrotreated naphtha .....	64742-48-9	0	None.
17. Hydrotreated light distillate .....	64742-47-8	0.001	Toluene.
18. Stoddard solvent .....	8052-41-3	0.01	Xylenes.
19. Super high-flash naphtha ...	64742-95-6	0.05	Xylenes.
20. Varsol® solvent .....	8052-49-3	0.01	0.5% xylenes, 0.5% ethylbenzene.
21. VM & P naphtha .....	64742-89-8	0.06	3% toluene, 3% xylene.
22. Petroleum distillate mixture .....	68477-31-6	0.08	4% naphthalene, 4% biphenyl.

TABLE 4 TO SUBPART IIII OF PART 63—DEFAULT ORGANIC HAP MASS FRACTION FOR PETROLEUM SOLVENT GROUPS<sup>a</sup>

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data

Solvent type	Average organic HAP mass fraction	Typical organic HAP, percent by mass
Aliphatic <sup>b</sup> .....	0.03	1% Xylene, 1% Toluene, and 1% Ethylbenzene.
Aromatic <sup>c</sup> .....	0.06	4% Xylene, 1% Toluene, and 1% Ethylbenzene.

<sup>a</sup>Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart, and you only know whether the blend is aliphatic or aromatic.

<sup>b</sup>E.g., Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

<sup>c</sup>E.g., Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

APPENDIX A TO SUBPART IIII OF PART 63—DETERMINATION OF CAPTURE EFFICIENCY OF AUTOMOBILE AND LIGHT-DUTY TRUCK SPRAY BOOTH EMISSIONS FROM SOLVENT-BORNE COATINGS USING PANEL TESTING

1.0 Applicability, Principle, and Summary of Procedure.

1.1 Applicability.

This procedure applies to the determination of capture efficiency of automobile and light-duty truck spray booth emissions from solvent-borne coatings using panel testing. This procedure can be used to determine capture efficiency for partially controlled spray booths (e.g., automated spray zones controlled and manual spray zones not controlled) and for fully controlled spray booths.

1.2 Principle.

1.2.1 The volatile organic compounds (VOC) associated with the coating solids deposited on a part (or panel) in a controlled spray booth zone (or group of contiguous controlled spray booth zones) partition themselves between the VOC that volatilize in the controlled spray booth zone (principally between the spray gun and the part) and the VOC that remain on the part (or panel) when the part (or panel) leaves the controlled spray booth zone. For solvent-borne coatings essentially all of the VOC associated with the coating solids deposited on a part (or panel) in a controlled spray booth zone that volatilize in the controlled spray booth zone pass through the waterwash and are exhausted from the controlled spray booth zone to the control device.

1.2.2 The VOC associated with the overspray coating solids in a controlled spray booth zone partition themselves between the VOC that volatilize in the controlled spray booth zone and the VOC that are still tied to the overspray coating solids when the overspray coating solids hit the waterwash. For solvent-borne coatings almost all of the VOC associated with the overspray coating solids that volatilize in the controlled spray booth zone pass through the waterwash and are exhausted from the controlled spray booth zone to the control device. The exact fate of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash is unknown. This procedure assumes that none of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash are captured and delivered to the control device. Much of this VOC may become entrained in the water along with the overspray coating solids. Most of the VOC that become entrained in the water along with the overspray coating solids leave the water, but the point at which this VOC leave the water is unknown. Some of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash may pass through the waterwash and be exhausted from the controlled spray booth zone to the control device.

1.2.3 This procedure assumes that the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone, passes through the waterwash and is exhausted from the controlled spray booth zone to the control device is equal to the portion of the VOC associated with the coating solids deposited on a part (or panel) in that controlled spray booth zone that volatilizes in the controlled spray booth zone, passes through the waterwash, and is exhausted from the controlled spray booth zone to the control device. This assumption is equivalent to treating all of the coating solids sprayed in the controlled spray booth zone as if they are deposited

coating solids (*i.e.*, assuming 100 percent transfer efficiency) for purposes of using a panel test to determine spray booth capture efficiency.

1.2.4 This is a conservative (low) assumption for the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone. Thus, this assumption results in an underestimate of conservative capture efficiency. The overspray coating solids have more travel time and distance from the spray gun to the waterwash than the deposited coating solids have between the spray gun and the part (or panel). Therefore, the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone should be greater than the portion of the VOC associated with the coating solids deposited on a part (or panel) in that controlled spray booth zone that volatilizes in that controlled spray booth zone.

### 1.3 Summary of Procedure.

1.3.1 A panel test is performed to determine the mass of VOC that remains on the panel when the panel leaves a controlled spray booth zone. The total mass of VOC associated with the coating solids deposited on the panel is calculated.

1.3.2 The percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that remains on the panel when the panel leaves the controlled section of the spray booth is then calculated from the ratio of the two previously determined masses. The percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that is captured and delivered to the control device equals 100 minus this percentage. (The mass of VOC associated with the coating solids deposited on the panel which is volatilized and captured in the controlled spray booth zone equals the difference between the total mass of VOC associated with the coating solids deposited on the panel and the mass of VOC remaining with the coating solids deposited on the panel when the panel leaves the controlled spray booth zone.)

1.3.3 The percent of the total VOC associated with the coating sprayed in the controlled spray booth zone that is captured and delivered to the control device is assumed to be equal to the percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that is captured and delivered to the control device. The percent of the total VOC associated with the coating sprayed in the entire spray booth that is captured and delivered to the control device can be calculated by multiplying the percent of the total VOC associated with the coating sprayed in the controlled spray booth zone that is captured and

delivered to the control device by the fraction of coating sprayed in the spray booth that is sprayed in the controlled spray booth zone.

#### 2.0 Procedure.

2.1 You may conduct panel testing to determine the capture efficiency of spray booth emissions. You must follow the instructions and calculations in this appendix A, and use the panel testing procedures in ASTM Method D5087-02, "Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)" (incorporated by reference, see §63.14), or the guidelines presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). You must weigh panels at the points described in section 2.5 of this appendix A and perform calculations as described in sections 3 and 4 of this appendix A. You may conduct panel tests on the production paint line in your facility or in a laboratory simulation of the production paint line in your facility.

2.2 You may conduct panel testing on representative coatings as described in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). If you panel test representative coatings, then you may calculate either a unique percent capture efficiency value for each coating grouped with that representative coating, or a composite percent capture efficiency value for the group of coatings. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency value for that coating.

#### 2.3 Identification of Controlled Spray Booth Zones.

You must identify each controlled spray booth zone or each group of contiguous controlled spray booth zones to be tested. (For example, a controlled bell zone immediately followed by a controlled robotic zone.) Separate panel tests are required for non-contiguous controlled spray booth zones. The flash zone between the last basecoat zone and the first clearcoat zone makes these zones non-contiguous.

#### 2.4 Where to Apply Coating to the Panel.

If you are conducting a panel test for a single controlled spray booth zone, then you must apply coating to the panel only in that controlled spray booth zone. If you are conducting a panel test for a group of contiguous controlled spray booth zones, then you must apply coating to the panel only in that

group of contiguous controlled spray booth zones.

#### 2.5 How to Process and When to Weigh the Panel.

The instructions in this section pertain to panel testing of coating, *i*, or of the coating representing the group of coatings that includes coating, *i*.

2.5.1 You must weigh the blank panel. (Same as in bake oven panel test.) The mass of the blank panel is represented by  $W_{\text{blank},i}$  (grams).

2.5.2 Apply coating, *i*, or the coating representing coating, *i*, to the panel in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested (in plant test), or in a simulation of the controlled spray booth zone or group of contiguous controlled spray booth zones being tested (laboratory test).

2.5.3 Remove and weigh the wet panel as soon as the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested. (Different than bake oven panel test.) This weighing must be conducted quickly to avoid further evaporation of VOC. The mass of the wet panel is represented by  $W_{\text{wet},i}$  (grams).

2.5.4 Return the wet panel to the point in the coating process or simulation of the coating process where it was removed for weighing.

2.5.5 Allow the panel to travel through the rest of the coating process in the plant or laboratory simulation of the coating process. You must not apply any more coating to the panel after it leaves the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested. The rest of the coating process or simulation of the coating process consists of:

2.5.5.1 All of the spray booth zone(s) or simulation of all of the spray booth zone(s) located after the controlled spray booth zone or group of contiguous controlled spray booth zones being tested and before the bake oven where the coating applied to the panel is cured,

2.5.5.2 All of the flash-off area(s) or simulation of all of the flash-off area(s) located after the controlled spray booth zone or group of contiguous controlled spray booth zones being tested and before the bake oven where the coating applied to the panel is cured, and

2.5.5.3 The bake oven or simulation of the bake oven where the coating applied to the panel is cured.

2.5.6 After the panel exits the bake oven, you must cool and weigh the baked panel. (Same as in bake oven panel test.) The mass of the baked panel is represented by  $W_{\text{baked},i}$  (grams).

#### 3.0 Panel Calculations.

The instructions in this section pertain to panel testing of coating, *i*, or of the coating

representing the group of coatings that includes coating, i.

3.1 The mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel equals the mass of the baked panel minus the mass of the blank panel as shown in Equation A-1.

$$W_{sdep,i} = W_{baked,i} - W_{blank,i} \quad (\text{Eq. A-1})$$

Where:

$W_{sdep,i}$  = Mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel, grams.

3.2 The mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested equals the mass of the wet panel when the wet panel

leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested minus the mass of the baked panel as shown in Equation A-2.

$$W_{rem,i} = W_{wet,i} - W_{baked,i} \quad (\text{Eq. A-2})$$

Where:

$W_{rem,i}$  = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, grams.

3.3 Calculate the mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel as shown in Equation A-3.

$$P_{m,i} = (W_{rem,i}) / (W_{sdep,i}) \quad (\text{Eq. A-3})$$

Where:

$P_{m,i}$  = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel, grams of VOC remaining per gram of coating solids deposited.

$W_{rem,i}$  = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, grams.

$W_{sdep,i}$  = Mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel, grams.

#### 4.0 Converting Panel Result to Percent Capture.

The instructions in this section pertain to panel testing of for coating, i, or of the coating representing the group of coatings that includes coating, i.

4.1 If you panel test representative coatings, then you may convert the panel test result for each representative coating from section 3.3 of this appendix A either to a unique percent capture efficiency value for each coating grouped with that representative coating by using coating specific values

for the mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A, or to a composite percent capture efficiency value for the group of coatings by using the average values for the group of coatings for mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency value by using coating specific values for the mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A. The mass fraction of VOC in the coating and the mass fraction of solids in the coating must be determined by Method 24 (appendix A to 40 CFR part 60) or by following the guidelines for combining analytical VOC content and formulation solvent content presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

4.2 The percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating solids deposited on the panel that remains on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested is calculated using Equation A-4.

$$Pvoc_{pan,i} = (P_{m,i})(W_{s,i})(100)/(Wvoc_{c,i}) \quad (\text{Eq. A-4})$$

Where:

$Pvoc_{pan,i}$  = Percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating solids deposited on the panel that remains on the wet panel when the wet panel leaves the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, percent.

$P_{m,i}$  = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel, grams of VOC remaining per gram of coating solids deposited.

$W_{s,i}$  = Mass fraction of coating solids for coating, i, or average mass fraction of coating solids for the group of coatings including coating, i, grams coating solids per gram coating, determined by Method 24 (appendix A to 40 CFR part 60) or by following the guidelines for combining analytical VOC content and formulation solvent content presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

$Wvoc_{c,i}$  = Mass fraction of VOC in coating, i, or average mass fraction of VOC for the group of coatings including coating, i, grams VOC per grams coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/

3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

4.3 The percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating sprayed in the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested that is captured in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested,  $CE_{zone,i}$  (percent), is calculated using Equation A-5.

$$CE_{zone,i} = 100 - Pvoc_{pan,i} \quad (\text{Eq. A-5})$$

Where:

$CE_{zone,i}$  = Capture efficiency for coating, i, or for the group of coatings including coating, i, in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested as a percentage of the VOC in the coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, percent.

4.4 Calculate the percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the entire volume of coating, i, or with the total volume of all of the coatings grouped with coating, i, sprayed in the entire spray booth that is captured in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, using Equation A-6. The volume of coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, and the volume of coating, i, or of the group of coatings including coating, i, sprayed in the entire spray booth may be determined from gun on times and fluid flow rates or from direct measurements of coating usage.

$$CE_i = (CE_{zone,i})(V_{zone,i})/(V_{booth,i}) \quad (\text{Eq. A-6})$$

Where:

$CE_i$  = Capture efficiency for coating, i, or for the group of coatings including coating, i, in the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested as a percentage of the VOC in the coating, i, or of the group of coatings including coating, i, sprayed in

the entire spray booth in which the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, percent.

$V_{zone,i}$  = Volume of coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of

## Environmental Protection Agency

## § 63.3310

contiguous controlled spray booth zones being tested, liters.

$V_{\text{booth}, i}$  = Volume of coating, *i*, or of the group of coatings including coating, *i*, sprayed in the entire spray booth containing the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, liters.

4.5 If you conduct multiple panel tests for the same coating or same group of coatings in the same spray booth (either because the coating or group of coatings is controlled in non-contiguous zones of the spray booth, or because you choose to conduct separate panel tests for contiguous controlled spray booth zones), then you may add the result from section 4.4 for each such panel test to get the total capture efficiency for the coating or group of coatings over all of the controlled zones in the spray booth for the coating or group of coatings.

### Subpart JJJ—National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

SOURCE: 67 FR 72341, Dec. 4, 2002, unless otherwise noted.

#### WHAT THIS SUBPART COVERS

#### § 63.3280 What is in this subpart?

This subpart describes the actions you must take to reduce emissions of organic hazardous air pollutants (HAP) from paper and other web coating operations. This subpart establishes emission standards for web coating lines and specifies what you must do to comply if you own or operate a facility with web coating lines that is a major source of HAP. Certain requirements apply to all who are subject to this subpart; others depend on the means you use to comply with an emission standard.

#### § 63.3290 Does this subpart apply to me?

The provisions of this subpart apply to each new and existing facility that is a major source of HAP, as defined in § 63.2, at which web coating lines are operated.

#### § 63.3300 Which of my emission sources are affected by this subpart?

The affected source subject to this subpart is the collection of all web

coating lines at your facility. This includes web coating lines engaged in the coating of metal webs that are used in flexible packaging, and web coating lines engaged in the coating of fabric substrates for use in pressure sensitive tape and abrasive materials. Web coating lines specified in paragraphs (a) through (g) of this section are not part of the affected source of this subpart.

(a) Any web coating line that is stand-alone equipment under subpart KK of this part (National Emission Standards for the Printing and Publishing Industry) which the owner or operator includes in the affected source under subpart KK.

(b) Any web coating line that is a product and packaging rotogravure or wide-web flexographic press under subpart KK of this part (national emission standards for the printing and publishing industry) which is included in the affected source under subpart KK.

(c) Web coating in lithography, screenprinting, letterpress, and narrow-web flexographic printing processes.

(d) Any web coating line subject to subpart EE of this part (national emission standards for magnetic tape manufacturing operations).

(e) Any web coating line that will be subject to the national emission standards for hazardous air pollutants (NESHAP) for surface coating of metal coil currently under development.

(f) Any web coating line that will be subject to the NESHAP for the printing, coating, and dyeing of fabric and other textiles currently under development. This would include any web coating line that coats both a paper or other web substrate and a fabric or other textile substrate, except for a fabric substrate used for pressure sensitive tape and abrasive materials.

(g) Any web coating line that is defined as research or laboratory equipment in § 63.3310.

[67 FR 72341, Dec. 4, 2002, as amended at 71 FR 29805, May 24, 2006]

#### § 63.3310 What definitions are used in this subpart?

All terms used in this subpart that are not defined in this section have the meaning given to them in the Clean