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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 con-

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tiguous 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.

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

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 contiguous controlled spray booth zones being tested, liters.

$V_{booth,i}$ = 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.

[69 FR 22623, Apr. 26, 2004, as amended at 85 FR 41137, July 8, 2020]

Subpart JJJJ—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

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KK of this part (National Emission Standards for Hazardous Air Pollutants (NESHAP) 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 (NESHAP 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 (NESHAP for Magnetic Tape Manufacturing Operations).

(e) Any web coating line subject to subpart SSSS of this part (NESHAP for Surface Coating of Metal Coil).

(f) Any web coating line subject to subpart OOOO of this part (NESHAP for the Printing, Coating, and Dyeing of Fabrics and Other Textiles). This includes 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.

(h) Any web coating line that coats both paper or a web, and another substrate such as fabric, may comply with the subpart of this part that applies to the predominant activity conducted on the affected source. Predominant activity for this subpart is 90 percent of the mass of substrate coated during the compliance period. For example, a web coating line that coats 90 percent or more of a paper substrate, and 10 percent or less of a fabric or other textile substrate, would be subject to this subpart and not subpart OOOO of this part. You may use data for any reasonable time period of at least one year in determining the relative amount of coating activity, as long as they are expected to represent the way the source will continue to operate in the future. You must demonstrate and document the predominant activity annually.

(i) Any web coating line subject to this part that is modified to include printing activities, may continue to demonstrate compliance with this part, in lieu of demonstrating compliance with subpart KK of this part. Any web coating line with product and packaging rotogravure print station(s) and/or a wide-web flexographic print station(s) that is subject to this subpart may elect to continue demonstrating compliance with this subpart in lieu of subpart KK of this part, if the mass of the materials applied to the line's print station(s) in a month ever exceed 5 percent of the total mass of materials applied onto the line during the same period.

(j) If all of the subject web coating lines at your facility utilize non-HAP coatings, you can become exempt from the reporting requirements of this subpart, provided you submit a one-time report as required in § 63.3370(s) to your permitting authority documenting the use of only non-HAP coatings.

[67 FR 72341, Dec. 4, 2002, as amended at 71 FR 29805, May 24, 2006; 85 FR 41295, July 9, 2020]

§ 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 Air Act (CAA) and in subpart A of this part.

Always-controlled work station means a work station associated with a dryer from which the exhaust is delivered to a control device with no provision for the dryer exhaust to bypass the control device unless there is an interlock to interrupt and prevent continued coating during a bypass. Sampling lines for analyzers, relief valves needed for safety purposes, and periodic cycling of exhaust dampers to ensure safe operation are not considered bypass lines.

Applied means, for the purposes of this subpart, the amount of organic HAP, coating material, or coating solids (as appropriate for the emission standards in § 63.3320(b)) used by the affected source during the compliance period.

As-applied means the condition of a coating at the time of application to a substrate, including any added solvent.

As-purchased means the condition of a coating as delivered to the user.

Capture efficiency means the fraction of all organic HAP emissions generated by a process that is delivered to a control device, expressed as a percentage.

Capture system means a hood, enclosed room, or other means of collecting organic HAP emissions into a closed-vent system that exhausts to a control device.

Car-seal means a seal that is placed on a device that is used to change the position of a valve or damper (e.g., from open to closed) in such a way that the position of the valve or damper cannot be changed without breaking the seal.

Coating material(s) means all liquid or semi-liquid materials (including the solids fraction of those materials as applied), such as inks, varnishes, adhesives (including hot melt adhesives or other hot melt materials), primers, solvents, reducers, and other materials applied to a substrate via a web coating line. Materials used to form a substrate or applied via vapor deposition, and dry abrasive materials deposited on top of a coated web, are not considered coating materials.

Control device means a device such as a solvent recovery device or oxidizer which reduces the organic HAP in an exhaust gas by recovery or by destruction.

Control device efficiency means the ratio of organic HAP emissions recovered or destroyed by a control device to the total organic HAP emissions that are introduced into the control device, expressed as a percentage.

Day means a 24-consecutive-hour period.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;

(2) 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

(3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during start-up, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Existing affected source means any affected source the construction or reconstruction of which is commenced on or before September 13, 2000, and has not undergone reconstruction as defined in § 63.2.

Fabric means any woven, knitted, plaited, braided, felted, or non-woven material made of filaments, fibers, or yarns including thread. This term includes material made of fiberglass, natural fibers, synthetic fibers, or composite materials.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Flexible packaging means any package or part of a package the shape of which can be readily changed. Flexible packaging includes, but is not limited to, bags, pouches, labels, liners and wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials.

Formulation data means data on the organic HAP mass fraction, volatile matter mass fraction, or coating solids mass fraction of a material that is generated by the manufacturer or means other than a test method specified in this subpart or an approved alternative method.

HAP means hazardous air pollutants.

HAP applied means the organic HAP content of all coating materials applied to a substrate by a web coating line at an affected source.

Intermittently-controlled work station means a work station associated with a dryer with provisions for the dryer exhaust to be delivered to or diverted from a control device through a bypass line, depending on the position of a valve or damper. Sampling lines for analyzers, relief valves needed for safety purposes, and periodic cycling of exhaust dampers to ensure safe operation are not considered bypass lines.

Metal coil means a continuous metal strip that is at least 0.15 millimeter

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(0.006 inch) thick which is packaged in a roll or coil prior to coating. After coating, it may or may not be rewound into a roll or coil. Metal coil does not include metal webs that are coated for use in flexible packaging.

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.

Never-controlled work station means a work station that is not equipped with provisions by which any emissions, including those in the exhaust from any associated dryer, may be delivered to a control device.

New affected source means any affected source the construction or reconstruction of which is commenced after September 13, 2000.

Overall organic HAP control efficiency means the total efficiency of a capture and control system.

Pressure sensitive tape means a flexible backing material with a pressure-sensitive adhesive coating on one or both sides of the backing. Examples include, but are not limited to, duct/duct insulation tape and medical tape.

Research or laboratory equipment means any equipment for which the primary purpose is to conduct research and development into new processes and products where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce except in a *de minimis* manner.

Rewind or cutting station means a unit from which substrate is collected at the outlet of a web coating line.

Uncontrolled coating line means a coating line consisting of only never-controlled work stations.

Unwind or feed station means a unit from which substrate is fed to a web coating line.

Web means a continuous substrate (e.g., paper, film, foil) which is flexible enough to be wound or unwound as rolls.

Web coating line means any number of work stations, of which one or more applies a continuous layer of liquid or semi-liquid coating material across the entire width or any portion of the width of a web substrate, and any asso-

ciated curing/drying equipment between an unwind or feed station and a rewind or cutting station.

Work station means a unit on a web coating line where coating material is deposited onto a web substrate.

[67 FR 72341, Dec. 4, 2002, as amended at 85 FR 41296, July 9, 2020]

EMISSION STANDARDS AND COMPLIANCE DATES

§ 63.3320 What emission standards must I meet?

(a) If you own or operate any affected source that is subject to the requirements of this subpart, you must comply with these requirements on and after the compliance dates as specified in § 63.3330.

(b) You must limit organic HAP emissions to the level specified in paragraph (b)(1), (2), (3), or (4) of this section for all periods of operation, including startup, shutdown, and malfunction (SSM).

(1) No more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources, and no more than 2 percent of the organic HAP applied for each month (98 percent reduction) at new affected sources; or

(2) No more than 4 percent of the mass of coating materials applied for each month at existing affected sources, and no more than 1.6 percent of the mass of coating materials applied for each month at new affected sources; or

(3) No more than 20 percent of the mass of coating solids applied for each month at existing affected sources, and no more than 8 percent of the coating solids applied for each month at new affected sources.

(4) If you use an oxidizer to control organic HAP emissions, operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) on a dry basis is achieved and the efficiency of the capture system is 100 percent.

(c) You must demonstrate compliance with this subpart by following the procedures in § 63.3370.

[67 FR 72341, Dec. 4, 2002, as amended at 85 FR 41296, July 9, 2020]

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§ 63.3321 What operating limits must I meet?

(a) For any web coating line or group of web coating lines for which you use add-on control devices to demonstrate compliance with the emission standards in § 63.3320, unless you use a solvent recovery system and conduct a liquid-liquid material balance, you must meet the operating limits specified in Table 1 to this subpart or according to paragraph (b) of this section. These operating limits apply to emission capture systems and control devices used to demonstrate compliance with this subpart, and you must establish the operating limits during the performance test according to the requirements in § 63.3360(e)(3). You must meet the operating limits at all times after you establish them.

(b) If you use an add-on control device other than those listed in Table 1 to this subpart or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under § 63.8(f).

[67 FR 72341, Dec. 4, 2002, as amended at 85 FR 41296, July 9, 2020]

§ 63.3330 When must I comply?

(a) For affected sources which commenced construction or reconstruction prior to September 19, 2019, you must comply as follows:

(1) Before July 9, 2021, the affected coating operation(s) must be in compliance with the applicable emission limit in § 63.3320 at all times, except during periods of SSM. On and after July 9, 2021, the affected coating operation(s) must be in compliance with the applicable emission limit in § 63.3320 at all times, including periods of SSM.

(2) A periodic emissions performance test must be performed by July 9, 2023, or within 60 months of the previous test, whichever is later, and subsequent tests no later than 60 months thereafter, as required in § 63.3360. Performance testing for HAP or VOC destruction efficiency required by state agencies can be used to meet this requirement.

(3) After July 9, 2021, you must electronically submit initial notifications, notifications of compliance status, performance evaluation reports, and performance test reports, as required in § 63.3400. Semiannual compliance reports must be submitted electronically for the first full semiannual compliance period after the template has been available in the Compliance and Emissions Data Reporting Interface (CEDRI) for 1 year.

(b) For new affected sources which commenced construction or reconstruction after September 19, 2019, you must comply as indicated in paragraphs (b)(1) through (3) of this section. Existing affected sources which have undergone reconstruction as defined in § 63.2 are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the existing affected source has been reconstructed. Additionally, the costs of retrofitting and replacing of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

(1) The coating operation(s) must be in compliance with the applicable emission limit in § 63.3320 at all times, including periods of SSM, starting July 9, 2020, or immediately upon startup, whichever is later.

(2) You must complete any initial performance test required in § 63.3360 within the time limits specified in § 63.7(a)(2), and subsequent tests no later than 60 months thereafter.

(3) You must electronically submit initial notifications, notifications of compliance status, performance evaluation reports, and performance test reports as required in § 63.3400 starting July 9, 2020, or immediately upon startup, whichever is later. Semiannual compliance reports must be submitted electronically for the first full semiannual compliance period after the template has been available in CEDRI for 1 year.

[85 FR 41296, July 9, 2020]

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GENERAL REQUIREMENTS FOR COMPLIANCE WITH THE EMISSION STANDARDS AND FOR MONITORING AND PERFORMANCE TESTS

§ 63.3340 What general requirements must I meet to comply with the standards?

(a) Before July 9, 2021, for each existing source for which construction or reconstruction commenced on or before September 19, 2019, you must be in compliance with the emission limits and operating limits in this subpart at all times, except during periods of SSM. On and after July 9, 2021, for each such source you must be in compliance with the emission limits and operating limits in this subpart at all times. For new and reconstructed sources for which construction or reconstruction commenced after September 19, 2019, you must be in compliance with the emission limits and operating limits in this subpart at all times, starting July 9, 2020, or immediately upon startup, whichever is later.

(b) For affected sources as of September 19, 2019, before July 9, 2021, you must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in § 63.6(e)(1)(i). On and after July 9, 2021, for such sources and on July 9, 2020, or immediately upon startup, whichever is later, for new or reconstructed affected sources, you must always operate and maintain your affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance proce-

dures, review of operation and maintenance records, and inspection of the source.

(c) You must conduct each performance test required by § 63.3360 according to the requirements in § 63.3360(e)(2) and under the conditions in this section unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).

(1) Representative coating operation operating conditions. You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, and nonoperation do not constitute representative conditions. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Representative emission capture system and add-on control device operating conditions. You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(d) Table 2 to this subpart specifies the provisions of subpart A of this part that apply if you are subject to subpart JJJJ.

[85 FR 41296, July 9, 2020]

§ 63.3350 If I use a control device to comply with the emission standards, what monitoring must I do?

(a) A summary of monitoring you must do follows:

If you operate a web coating line, and have the following:	Then you must:
(1) Intermittently-controlled work stations ...	Record parameters related to possible exhaust flow bypass of control device and to coating use (§ 63.3350(c)).
(2) Solvent recovery unit	Operate continuous emission monitoring system and perform quarterly audits or determine volatile matter recovered and conduct a liquid-liquid material balance (§ 63.3350(d)).
(3) Control Device	Operate continuous parameter monitoring system (§ 63.3350(e)).
(4) Capture system	Monitor capture system operating parameter (§ 63.3350(f)).

(b) Following the date on which the initial or periodic performance test of a control device is completed to demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device used to comply with § 63.3320. You must install and operate the monitoring equipment as specified in paragraphs (c) and (f) of this section.

(c) *Bypass and coating use monitoring.* If you own or operate web coating lines with intermittently-controlled work stations, you must monitor bypasses of the control device and the mass of each coating material applied at the work station during any such bypass. If using a control device for complying with the requirements of this subpart, you must demonstrate that any coating material applied on a never-controlled work station or an intermittently-controlled work station operated in bypass mode is allowed in your compliance demonstration according to § 63.3370(o) and (p). The bypass monitoring must be conducted using at least one of the procedures in paragraphs (c)(1) through (4) of this section for each work station and associated dryer.

(1) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer’s specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour as well as every time the flow direction is changed. A flow control position indicator must be installed at the entrance to any bypass line that could

divert the exhaust stream away from the control device to the atmosphere.

(2) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve or damper is maintained in the closed position, and the exhaust stream is not diverted through the bypass line.

(3) *Valve closure continuous monitoring.* Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position when the emission source is in operation and is using a control device for compliance with the requirements of this subpart. The monitoring system must be inspected at least once every month to verify that the monitor will indicate valve position.

(4) *Automatic shutdown system.* Use an automatic shutdown system in which the web coating line is stopped when flow is diverted away from the control device to any bypass line when the control device is in operation. The automatic system must be inspected at least once every month to verify that it will detect diversions of flow and would shut down operations in the event of such a diversion.

(d) *Solvent recovery unit.* If you own or operate a solvent recovery unit to comply with § 63.3320, you must meet the requirements in either paragraph (d)(1) or (2) of this section depending on how control efficiency is determined.

(1) *Continuous emission monitoring system (CEMS).* If you are demonstrating compliance with the emission standards in § 63.3320 through continuous

emission monitoring of a control device, you must install, calibrate, operate, and maintain the CEMS according to paragraphs (d)(1)(i) through (iii) of this section.

(i) Measure the total organic volatile matter mass flow rate at both the control device inlet and the outlet such that the reduction efficiency can be determined. Each continuous emission monitor must comply with performance specification 6, 8, or 9 of 40 CFR part 60, appendix B, as appropriate.

(ii) You must follow the quality assurance procedures in procedure 1, appendix F of 40 CFR part 60. In conducting the quarterly audits of the monitors as required by procedure 1, appendix F, you must use compounds representative of the gaseous emission stream being controlled.

(iii) You must have valid data from at least 90 percent of the hours when the process is operated. Invalid or missing data should be reported as a deviation in the semiannual compliance report.

(2) *Liquid-liquid material balance.* If you are demonstrating compliance with the emission standards in § 63.3320 through liquid-liquid material balance, you must install, calibrate, maintain, and operate according to the manufacturer's specifications a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device must be certified by the manufacturer to be accurate to within ± 2.0 percent by mass.

(e) *Continuous parameter monitoring system (CPMS).* If you are using a control device to comply with the emission standards in § 63.3320, you must install, operate, and maintain each CPMS specified in paragraphs (e)(10) and (11) and (f) of this section according to the requirements in paragraphs (e)(1) through (9) of this section. You must install, operate, and maintain each CPMS specified in paragraph (c) of this section according to paragraphs (e)(5) through (8) of this section.

(1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation to have a valid hour of data.

(2) You must have valid data from at least 90 percent of the hours when the process operated.

(3) You must determine the hourly average of all recorded readings according to paragraphs (e)(3)(i) and (ii) of this section.

(i) To calculate a valid hourly value, you must have at least three of four equally spaced data values from that hour from a continuous monitoring system (CMS) that is not out-of-control.

(ii) Provided all of the readings recorded in accordance with paragraph (e)(3) of this section clearly demonstrate continuous compliance with the standard that applies to you, then you are not required to determine the hourly average of all recorded readings.

(4) You must determine the block 3-hour average of all recorded readings for each operating period. To calculate the average for each 3-hour averaging period, you must have at least two of three of the hourly averages for that period using only average values that are based on valid data (*i.e.*, not from out-of-control periods).

(5) Except for temperature sensors, you must develop a quality control program that must contain, at a minimum, a written protocol that describes the procedures for each of the operations in § 63.3350(e)(5)(i) through (vi). The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (*i.e.*, superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. For temperature sensors, you must follow the requirements in § 63.3350(e)(10).

(i) Initial and any subsequent calibration of the continuous monitoring system (CMS);

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventative maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.

(6) You must record the results of each inspection, calibration, and validation check of the CPMS.

(7) At all times, you must maintain the monitoring system in proper working order including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(8) Except for monitoring malfunctions, associated repairs, or required quality assurance or control activities (including calibration checks or required zero and span adjustments), you must conduct all monitoring at all times that the unit is operating. Data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities shall not be used for purposes of calculating the emissions concentrations and percent reductions specified in § 63.3370. You must use all the valid data collected during all other periods in assessing compliance of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(9) Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation, and you must notify the Administrator in accordance with § 63.3400(c).

(10) *Oxidizer*. If you are using an oxidizer to comply with the emission standards of this subpart, you must comply with paragraphs (e)(10)(i) through (vi) of this section.

(i) Install, maintain, and operate temperature monitoring equipment according to the manufacturer's specifications.

(ii) For an oxidizer other than a catalytic oxidizer, install, operate, and maintain a temperature monitoring de-

vice equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in degrees Fahrenheit or ± 1.8 degrees Fahrenheit, whichever is greater. The temperature sensor must be installed in the combustion chamber at a location in the combustion zone.

(iii) For a catalytic oxidizer, install, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in degrees Fahrenheit or ± 1.8 degrees Fahrenheit, whichever is greater. The temperature sensor must be installed in the vent stream at the nearest feasible point to the inlet and outlet of the catalyst bed. Calculate the temperature rise across the catalyst.

(iv) For temperature sensors, you must develop a quality control program that must contain, at a minimum, a written protocol that describes the procedures for verifying that the temperature sensor is operating properly using at least one of the methods in paragraph (e)(10)(iv)(A), (B), (C), (D), (E), or (F) of this section. The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator:

(A) Semiannually, compare measured readings to a National Institute of Standards and Technology (NIST) traceable temperature measurement device or simulate a typical operating temperature using a NIST traceable temperature simulation device. When the temperature measurement device method is used, the sensor of the calibrated device must be placed as close as practicable to the process sensor, and both devices must be subjected to the same environmental conditions. The accuracy of the temperature measured must be 2.5 percent of the temperature measured by the NIST traceable device or 5 degrees Fahrenheit whichever is greater.

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(B) Annually validate the temperature sensor by following applicable mechanical and electrical validation procedures in the manufacturer owner's manual.

(C) Annually request the temperature sensor manufacturer to certify or recertify electromotive force (electrical properties) of the thermocouple.

(D) Annually replace the temperature sensor with a new certified temperature sensor in lieu of validation.

(E) Permanently install a redundant temperature sensor as close as practicable to the process temperature sensor. The sensors must yield a reading within 2.5 percent of each other for thermal oxidizers and catalytic oxidizers.

(F) Permanently install a temperature sensor with dual sensors to account for the possibility of failure.

(v) Conduct the validation checks in paragraph (e)(10)(iv)(A), (B), or (C) of this section any time the temperature sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(vi) At least quarterly, inspect temperature sensor components for proper connection and integrity or continuously operate an electronic monitoring system designed to notify personnel if the signal from the temperature sensor is interrupted.

(11) *Other types of control devices.* If you use a control device other than an oxidizer or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of an alternative monitoring method under § 63.8(f).

(f) *Capture system monitoring.* If you are complying with the emission stand-

ards in § 63.3320 through the use of a capture system and control device for one or more web coating lines, you must develop a site-specific monitoring plan containing the information specified in paragraphs (f)(1) and (2) of this section for these capture systems. You must monitor the capture system in accordance with paragraph (f)(3) of this section. You must make the monitoring plan available for inspection by the permitting authority upon request.

(1) The monitoring plan must:

(i) Identify the operating parameter to be monitored to ensure that the capture efficiency determined during the initial compliance test is maintained; and

(ii) Explain why this parameter is appropriate for demonstrating ongoing compliance; and

(iii) Identify the specific monitoring procedures.

(2) The monitoring plan must specify the operating parameter value or range of values that demonstrate compliance with the emission standards in § 63.3320. The specified operating parameter value or range of values must represent the conditions present when the capture system is being properly operated and maintained.

(3) You must conduct all capture system monitoring in accordance with the plan.

(4) Any deviation from the operating parameter value or range of values which are monitored according to the plan will be considered a deviation from the operating limit.

(5) You must review and update the capture system monitoring plan at least annually.

[67 FR 72341, Dec. 4, 2002, as amended at 85 FR 41297, July 9, 2020]

§ 63.3360 What performance tests must I conduct?

(a) The performance test methods you must conduct are as follows:

<p>If you control organic HAP on any individual web coating line or any group of web coating lines to demonstrate compliance with the emission limits in § 63.3320 by:</p>	<p>You must:</p>
<p>(1) Limiting organic HAP or volatile matter content of coatings.</p>	<p>Determine the organic HAP or volatile matter and coating solids content of coating materials according to procedures in paragraphs (c) and (d) of this section. If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to paragraph (g) of this section.</p>

<p>If you control organic HAP on any individual web coating line or any group of web coating lines to demonstrate compliance with the emission limits in § 63.3320 by:</p>	<p>You must:</p>
<p>(2) Using a capture and control system.</p>	<p>(i) Initially, conduct a performance test for each capture and control system to determine: The destruction or removal efficiency of each control device other than solvent recovery according to § 63.3360(e), and the capture efficiency of each capture system according to § 63.3360(f). If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to § 63.3360(g). (ii) Perform a periodic test once every 5 years for each thermal oxidizer to determine the destruction or removal efficiency according to § 63.3360(e). If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to § 63.3360(g). (iii) Either perform a periodic test once every 5 years for each catalytic oxidizer to determine the destruction or removal efficiency according to § 63.3360(e) OR perform a catalyst activity test annually on each catalytic oxidizer to ensure that the catalyst is performing properly according to § 63.3360(e)(3)(ii)(D)(1). If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to § 63.3360(g).</p>

(b) *Control Device.* If you are using a control device to comply with the emission standards in § 63.3320, you are not required to conduct a performance test to demonstrate compliance if one or more of the criteria in paragraphs (b)(1) through (3) of this section are met.

(1) The control device is equipped with continuous emission monitoring systems (CEMS) for determining inlet and outlet total organic volatile matter concentration and meeting the requirements of Performance Specification 6, 8, or 9 in appendix B to 40 CFR part 60 and capture efficiency has been determined in accordance with the requirements of this subpart such that an overall organic HAP control efficiency can be calculated, and the CEMS are used to demonstrate continuous compliance in accordance with § 63.3350; or

(2) You have met the requirements of § 63.7(h) (for waiver of performance testing); or

(3) The control device is a solvent recovery system and you comply by means of a monthly liquid-liquid material balance.

(c) *Organic HAP content.* If you determine compliance with the emission standards in § 63.3320 by means other than determining the overall organic HAP control efficiency of a control device, you must determine the organic HAP mass fraction of each coating material “as-purchased” by following one of the procedures in paragraphs (c)(1) through (3) of this section, and determine the organic HAP mass fraction of

each coating material “as-applied” by following the procedures in paragraph (c)(4) of this section. If the organic HAP content values are not determined using the procedures in paragraphs (c)(1) through (3) of this section, the owner or operator must submit an alternative test method for determining their values for approval by the Administrator in accordance with § 63.7(f). The recovery efficiency of the test method must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

(1) *Method 311.* You may test the coating material in accordance with Method 311 of appendix A of this part. The Method 311 determination may be performed by the manufacturer of the coating material and the results provided to the owner or operator. The organic HAP content must be calculated according to the criteria and procedures in paragraphs (c)(1)(i) through (iii) of this section.

(i) Include each organic HAP determined to be present at greater than or equal to 0.1 mass percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in section A.6.4 of appendix A to 29 CFR 1910.1200 and greater than or equal to 1.0 mass percent for other organic HAP compounds.

(ii) Express the mass fraction of each organic HAP you include according to paragraph (c)(1)(i) of this section as a value truncated to four places after the decimal point (for example, 0.3791).

(iii) Calculate the total mass fraction of organic HAP in the tested material by summing the counted individual organic HAP mass fractions and truncating the result to three places after the decimal point (for example, 0.763).

(2) *Method 24*. For coatings, determine the volatile organic content as mass fraction of nonaqueous volatile matter and use it as a substitute for organic HAP using Method 24 of appendix A-7 to 40 CFR part 60. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to you. One of the voluntary consensus standards in paragraphs (c)(2)(i) through (v) of this section may be used as an alternative to using Method 24.

(i) ASTM D1963-85 (Reapproved 1996), (incorporated by reference, see § 63.14);

(ii) ASTM D2111-10 (Reapproved 2015), (incorporated by reference, see § 63.14);

(iii) ASTM D2369-10 (Reapproved 2015)^e, (incorporated by reference, see § 63.14);

(iv) ASTM D2697-03 (Reapproved 2014), (incorporated by reference, see § 63.14); and

(v) ASTM D6093-97 (Reapproved 2016), (incorporated by reference, see § 63.14).

(3) *Formulation data*. You may use formulation data to determine the organic HAP mass fraction of a coating material. Formulation data may be provided to the owner or operator by the manufacturer of the material. In the event of an inconsistency between Method 311 (appendix A to this part) test data and a facility's formulation data, and the Method 311 test value is higher, the Method 311 data will govern. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in section A.6.4 of appendix A to 29 CFR 1910.1200 and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used.

(4) *As-applied organic HAP mass fraction*. If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied organic HAP mass fraction is equal to the as-purchased organic HAP mass fraction. Otherwise,

the as-applied organic HAP mass fraction must be calculated using Equation 4 of § 63.3370.

(d) *Volatile organic and coating solids content*. If you determine compliance with the emission standards in § 63.3320 by means other than determining the overall organic HAP control efficiency of a control device and you choose to use the volatile organic content as a surrogate for the organic HAP content of coatings, you must determine the as-purchased volatile organic content and coating solids content of each coating material applied by following the procedures in paragraph (d)(1) or (2) of this section, and the as-applied volatile organic content and coating solids content of each coating material by following the procedures in paragraph (d)(3) of this section.

(1) *Method 24*. You may determine the volatile organic and coating solids mass fraction of each coating applied using Method 24 (appendix A-7 to 40 CFR part 60). The Method 24 determination may be performed by the manufacturer of the material and the results provided to you. When using volatile organic compound content as a surrogate for HAP, you may also use ASTM D3960-98, (incorporated by reference, see § 63.14) as an alternative to Method 24. If these values cannot be determined using either of these methods, you must submit an alternative technique for determining their values for approval by the Administrator.

(2) *Formulation data*. You may determine the volatile organic content and coating solids content of a coating material based on formulation data and may rely on volatile organic content data provided by the manufacturer of the material. In the event of any inconsistency between the formulation data and the results of Method 24 of appendix A-7 to 40 CFR part 60 and the Method 24 results are higher, the results of Method 24 will govern.

(3) *As-applied volatile organic content and coating solids content*. If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied volatile organic content is equal to the as-purchased volatile content and the as-applied coating solids content is

equal to the as-purchased coating solids content. Otherwise, the as-applied volatile organic content must be calculated using Equation 5 to § 63.3370(c)(4) and the as-applied coating solids content must be calculated using Equation 6 to § 63.3370(d).

(e) *Control device efficiency.* If you are using an add-on control device other than solvent recovery, such as an oxidizer, to comply with the emission standards in § 63.3320, you must conduct a performance test to establish the destruction or removal efficiency of the control device according to the methods and procedures in paragraphs (e)(1) and (2) of this section. During the performance test, you must establish the operating limits required by § 63.3321 according to paragraph (e)(3) of this section.

(1) *Initial performance test.* An initial performance test to establish the destruction or removal efficiency of the control device used to comply with the emission standards in § 63.3320 must be conducted such that control device inlet and outlet testing is conducted simultaneously, and the data are reduced in accordance with the test methods and procedures in paragraphs (e)(1)(i) through (ix) of this section. You must conduct three test runs as specified in § 63.7(e)(3), and each test run must last at least 1 hour.

(i) Method 1 or 1A of appendix A-1 to 40 CFR part 60 must be used for sample and velocity traverses to determine sampling locations.

(ii) Method 2, 2A, 2C, 2D, or 2F of appendix A-1 to 40 CFR part 60, or Method 2G of appendix A-2 to 40 CFR part 60 must be used to determine gas volumetric flow rate.

(iii) Method 3, 3A, or 3B of appendix A-2 to 40 CFR part 60 must be used for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME PTC 19.10-1981 Part 10, (incorporated by reference, see § 63.14).

(iv) Method 4 of appendix A-3 to 40 CFR part 60 must be used to determine stack gas moisture.

(v) Methods for determining the gas volumetric flow rate, dry molecular

weight, and stack gas moisture must be performed, as applicable, during each test run.

(vi) Method 25 or 25A of appendix A-7 to 40 CFR part 60 must be used to determine total gaseous non-methane organic matter concentration. Use the same test method for both the inlet and outlet measurements which must be conducted simultaneously. You must submit notice of the intended test method to the Administrator for approval along with notification of the performance test required under § 63.7(b). You must use Method 25A if any of the conditions described in paragraphs (e)(1)(vi)(A) through (D) of this section apply to the control device.

(A) The control device is not an oxidizer.

(B) The control device is an oxidizer but an exhaust gas volatile organic matter concentration of 50 ppmv or less is required to comply with the emission standards in § 63.3320; or

(C) The control device is an oxidizer but the volatile organic matter concentration at the inlet to the control system and the required level of control are such that they result in exhaust gas volatile organic matter concentrations of 50 ppmv or less; or

(D) The control device is an oxidizer but because of the high efficiency of the control device the anticipated volatile organic matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.

(vii) Except as provided in § 63.7(e)(3), each performance test must consist of three separate runs with each run conducted for at least 1 hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining volatile organic compound concentrations and mass flow rates, the average of the results of all the runs will apply.

(viii) Volatile organic matter mass flow rates must be determined for each run specified in paragraph (e)(1)(vii) of this section using Equation 1:

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$$M_f = Q_{sd} C_c [12][0.0416][10^{-6}]$$

Equation 1

Where:

M_f = Total organic volatile matter mass flow rate, kilograms (kg)/hour (h).

Q_{sd} = Volumetric flow rate of gases entering or exiting the control device, as determined according to paragraph (e)(1)(ii) of this section, dry standard cubic meters (dscm)/h.

C_c = Concentration of organic compounds as carbon, ppmv.

12.0 = Molecular weight of carbon.

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m³) (@293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(ix) For each run, emission control device destruction or removal efficiency must be determined using Equation 2:

$$E = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100$$

Equation 2

Where:

E = Organic volatile matter control efficiency of the control device, percent.

M_{fi} = Organic volatile matter mass flow rate at the inlet to the control device, kg/h.

M_{fo} = Organic volatile matter mass flow rate at the outlet of the control device, kg/h.

(x) The control device destruction or removal efficiency is determined as the average of the efficiencies determined in the test runs and calculated in Equation 2.

(2) *Process information.* You must record such process information as may be necessary to determine the conditions in existence at the time of the performance test. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(3) *Operating limits.* If you are using one or more add-on control device other than a solvent recovery system for which you conduct a liquid-liquid material balance to comply with the emission standards in § 63.3320, you must establish the applicable operating limits required by § 63.3321. These oper-

ating limits apply to each add-on emission control device, and you must establish the operating limits during the performance test required by paragraph (e) of this section according to the requirements in paragraphs (e)(3)(i) and (ii) of this section.

(i) Thermal oxidizer. If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (e)(3)(i)(A) and (B) of this section.

(A) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(B) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. Maintain the 3-hour average combustion temperature no more than 50 degrees Fahrenheit lower than this average combustion temperature.

(ii) Catalytic oxidizer. If your add-on control device is a catalytic oxidizer, establish the operating limits according to paragraphs (e)(3)(ii)(A) and (B) or paragraphs (e)(3)(ii)(C) and (D) of this section.

(A) During the performance test, you must monitor and record the temperature just before the catalyst bed and

the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(B) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. Maintain the 3-hour average combustion temperature no more than 50 degrees Fahrenheit lower than this average combustion temperature or maintain the 3-hour average temperature difference across the catalyst bed at no less than 80 percent of this average temperature differential, provided that the minimum temperature is always 50 degrees Fahrenheit above the catalyst's ignition temperature.

(C) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (e)(3)(ii)(D) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. Maintain the 3-hour average combustion temperature no more than 50 degrees Fahrenheit lower than this average combustion temperature.

(D) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (e)(3)(ii)(C) of this section. The plan must address, at a minimum, the elements specified in paragraphs (e)(3)(ii)(D)(1) through (3) of this section.

(1) Annual sampling and analysis of the catalyst activity (*i.e.*, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures.

(2) Monthly inspection of the oxidizer system including the burner assembly and fuel supply lines for problems, and

(3) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must take corrective action consistent with the manufacturer's recommendations and conduct a new performance test to determine destruction efficiency in accordance with this section.

(4) *Control Destruction Efficiency Curve Development.* If you are using one or more add-on control devices other than a solvent recovery system for which you conduct a liquid-liquid material balance to comply with the emission standards in § 63.3320, you may establish a control destruction efficiency curve for use in estimating emissions that occur during deviations of the 3-hour operating parameters. This curve can be generated using test data or manufacturer's data that specifically documents the level of control at varying temperatures for your control device.

(f) *Capture efficiency.* If you demonstrate compliance by meeting the requirements of § 63.3370(f), (g), (h), (i), (j)(2), (l), (o)(2) or (3), or (q), you must determine capture efficiency using the procedures in paragraph (f)(1), (2), or (3) of this section, as applicable.

(1) You may assume your capture efficiency equals 100 percent if your capture system is a permanent total enclosure (PTE). You must confirm that your capture system is a PTE by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR part 51, appendix M, and that all exhaust gases from the enclosure are delivered to a control device.

(2) You may determine capture efficiency according to the protocols for testing with temporary total enclosures that are specified in Methods 204 and 204A through F of 40 CFR part 51, appendix M. You may exclude never-controlled work stations from such capture efficiency determinations.

(3) You may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in appendix A of subpart KK of this part. You may exclude never-controlled work stations from such capture efficiency determinations.

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(g) *Volatile matter retained in the coated web or otherwise not emitted to the atmosphere.* You may choose to take into account the mass of volatile matter retained in the coated web after curing or drying or otherwise not emitted to the atmosphere when determining compliance with the emission standards in § 63.3320. If you choose this option, you must develop a site- and product-specific emission factor (EF) and determine the amount of volatile matter retained in the coated web or otherwise not emitted using Equation 3 to § 63.3360(g)(1). The EF must be developed by conducting a performance test using an approved EPA test method, or alternative approved by the Administrator by obtaining the average of a three-run test. You may additionally use manufacturer's emissions test data (as long as it replicates the facility's coating formulation and operating conditions), or a mass-balance type approach using a modified Method 24 (including ASTM D5403-93 for radiation-curable coatings). The EF should

equal the proportion of the mass of volatile organics emitted to the mass of volatile organics in the coating materials evaluated. You may use the EF in your compliance calculations only for periods that the work station(s) was (were) used to make the product, or a similar product, corresponding to that produced during the performance test. You must develop a separate EF for each group of different products that you choose to utilize an EF for calculating emissions by conducting a separate performance test for that group of products. You must conduct a periodic performance test to re-establish the EF if there is a change in coating formulation, operating conditions, or other change that could reasonably be expected to increase emissions since the time of the last test that was used to establish the EF.

(1) Calculate the mass of volatile organics retained in the coated web or otherwise not emitted for the month from each group of similar products using Equation 3:

$$M_{vret} = (C_{vi}M_i + \sum_{j=1}^q C_{vij}M_{ij}) \times (1 - EF_i) \tag{Equation 3}$$

Where:

- M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg.
- C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.
- EF_i = Volatile organic matter site- and product-specific emission factor (three-run average determined from performance testing, evaluated as proportion of mass

volatile organics emitted to mass of volatile organics in the coatings used during the performance test).

(2) [Reserved]

(h) *Control devices in series.* If you use multiple control devices in series to comply with the emission standards in § 63.3320, the performance test must include, at a minimum, the inlet to the first control device in the series, the outlet of the last control device in the series, and all intermediate streams (*e.g.*, gaseous exhaust to the atmosphere or a liquid stream from a recovery device) that are not subsequently treated by any of the control devices in the series.

[67 FR 72341, Dec. 4, 2002, as amended at 85 FR 41298, July 9, 2020]

REQUIREMENTS FOR SHOWING COMPLIANCE

§ 63.3370 How do I demonstrate compliance with the emission standards?

You must demonstrate compliance each month with the emission limitations in § 63.3320(b)(1) through (4). For each monthly demonstration, you may apply any combination of the emission limitations to each of your web coating lines individually, to each of one or more groupings of your lines (including a single grouping encompassing all lines of your affected source), or to any combination of individual and grouped lines, so long as each web coating line is included in the compliance demonstration for the month (*i.e.*, you are not required to apply the same emission limitation to each of the individual lines or groups of lines). You may change the emission limitation that you apply each month to your individual or grouped lines, and you may change line groupings for your monthly compliance demonstration.

(a) A summary of how you must demonstrate compliance follows:

If you choose to demonstrate compliance by:	Then you must demonstrate that:	To accomplish this:
(1) Use of "as-purchased" compliant coating materials.	(i) Each coating material used at an existing affected source does not exceed 0.04 kg organic HAP per kg coating material, and each coating material used at a new affected source does not exceed 0.016 kg organic HAP per kg coating material as-purchased; or. (ii) Each coating material used at an existing affected source does not exceed 0.2 kg organic HAP per kg coating solids, and each coating material used at a new affected source does not exceed 0.08 kg organic HAP per kg coating solids as-purchased.	Follow the procedures set out in § 63.3370(b). Follow the procedures set out in § 63.3370(b).
(2) Use of "as-applied" compliant coating materials.	(i) Each coating material used at an existing affected source does not exceed 0.04 kg organic HAP per kg coating material, and each coating material used at a new affected source does not exceed 0.016 kg organic HAP per kg coating material as-applied; or. (ii) Each coating material used at an existing affected source does not exceed 0.2 kg organic HAP per kg coating solids, and each coating material used at a new affected source does not exceed 0.08 kg organic HAP per kg coating solids as-applied; or. (iii) Monthly average of all coating materials used at an existing affected source does not exceed 0.04 kg organic HAP per kg coating material, and monthly average of all coating materials used at a new affected source does not exceed 0.016 kg organic HAP per kg coating material as-applied on a monthly average basis; or. (iv) Monthly average of all coating materials used at an existing affected source does not exceed 0.2 kg organic HAP per kg coating solids, and monthly average of all coating materials used at a new affected source does not exceed 0.08 kg organic HAP per kg coating solids as-applied on a monthly average basis.	Follow the procedures set out in § 63.3370(c)(1). Use either Equation 4 or 5 of § 63.3370 to determine compliance with § 63.3320(b)(2) in accordance with § 63.3370(c)(5)(i). Follow the procedures set out in § 63.3370(c)(2). Use Equations 6 and 7 of § 63.3370 to determine compliance with § 63.3320(b)(3) in accordance with § 63.3370(c)(5)(i). Follow the procedures set out in § 63.3370(c)(3). Use Equation 8 of § 63.3370 to determine compliance with § 63.3320(b)(2) in accordance with § 63.3370(c)(5)(ii). Follow the procedures set out in § 63.3370(c)(4). Use Equation 9 of § 63.3370 to determine compliance with § 63.3320(b)(3) in accordance with § 63.3370(c)(5)(ii).
(3) Tracking total monthly organic HAP applied.	Total monthly organic HAP applied does not exceed the calculated limit based on emission limitations.	Follow the procedures set out in § 63.3370(d). Show that total monthly HAP applied (Equation 10 of § 63.3370) is less than the calculated equivalent allowable organic HAP (Equation 17 or 18 of § 63.3370).
(4) Accounting for volatile matter retained in the coated web or otherwise not emitted.	A site- and product-specific emission factor was appropriately established for the group of products for which the site- and product-specific emission factor was used in the compliance calculations.	Follow the procedures set out in § 63.3360(g) and § 63.3370(e)

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If you choose to demonstrate compliance by:	Then you must demonstrate that:	To accomplish this:
(5) Use of a capture system and control device.	<p>(i) Overall organic HAP control efficiency is equal to 95 percent at an existing affected source and 98 percent at a new affected source on a monthly basis; or oxidizer outlet organic HAP concentration is no greater than 20 ppmv and capture efficiency is 100 percent; or operating parameters are continuously monitored; or.</p> <p>(ii) Overall organic HAP emission rate does not exceed 0.2 kg organic HAP per kg coating solids for an existing affected source or 0.08 kg organic HAP per kg coating solids for a new affected source on a monthly average as-applied basis;.</p> <p>(iii) Overall organic HAP emission rate does not exceed 0.04 kg organic HAP per kg coating material for an existing affected source or 0.016 kg organic HAP per kg coating material for a new affected source on a monthly average as-applied basis; or.</p> <p>(iv) Overall organic HAP emission rate does not exceed the calculated limit based on emission limitations.</p>	<p>Follow the procedures set out in § 63.3370(f) to determine compliance with § 63.3320(b)(1) according to § 63.3370(j) if using a solvent recovery device, or § 63.3370(k) if using a control device and CPMS, or § 63.3370(l) if using an oxidizer.</p> <p>Follow the procedures set out in § 63.3370(g) to determine compliance with § 63.3320(b)(3) according to § 63.3370(j) if using a solvent recovery device, or § 63.3370(l) if using an oxidizer.</p> <p>Follow the procedures set out in § 63.3370(h) to determine compliance with § 63.3320(b)(2) according to § 63.3370(j) if using a solvent recovery device, or § 63.3370(l) if using an oxidizer.</p> <p>Follow the procedures set out in § 63.3370(i). Show that the monthly organic HAP emission rate is less than the calculated equivalent allowable organic HAP emission rate (Equation 17 or 18 of § 63.3370). Calculate the monthly organic HAP emission rate according to § 63.3370(j) if using a solvent recovery device, or § 63.3370(l) if using an oxidizer.</p>
(6) Use of multiple capture and/or control devices.	<p>(i) Overall organic HAP control efficiency is equal to 95 percent at an existing affected source and 98 percent at a new affected source on a monthly basis; or.</p> <p>(ii) Average equivalent organic HAP emission rate does not exceed 0.2 kg organic HAP per kg coating solids for an existing affected source or 0.08 kg organic HAP per kg coating solids for a new affected source on a monthly average as-applied basis; or.</p> <p>(iii) Average equivalent organic HAP emission rate does not exceed 0.04 kg organic HAP per kg coating material for an existing affected source or 0.016 kg organic HAP per kg coating material for a new affected source on a monthly average as-applied basis; or.</p> <p>(iv) Average equivalent organic HAP emission rate does not exceed the calculated limit based on emission limitations.</p>	<p>Follow the procedures set out in § 63.3370(f) to determine compliance with § 63.3320(b)(1) according to § 63.3370(f)(1) or (2).</p> <p>Follow the procedures set out in § 63.3370(g) to determine compliance with § 63.3320(b)(3) according to § 63.3370(o).</p> <p>Follow the procedures set out in § 63.3370(h) to determine compliance with § 63.3320(b)(2) according to § 63.3370(o).</p> <p>Follow the procedures set out in § 63.3370(i). Show that the monthly organic HAP emission rate is less than the calculated equivalent allowable organic HAP emission rate (Equation 17 or 18 of § 63.3370) according to § 63.3370(o).</p>
(7) Use of a combination of compliant coatings and control devices.	<p>(i) Average equivalent organic HAP emission rate does not exceed 0.2 kg organic HAP per kg coating solids for an existing affected source or 0.08 kg organic HAP per kg coating solids for a new affected source on a monthly average as-applied basis; or.</p>	<p>Follow the procedures set out in § 63.3370(g) to determine compliance with § 63.3320(b)(3) according to § 63.3370(o).</p>

If you choose to demonstrate compliance by:	Then you must demonstrate that:	To accomplish this:
	(ii) Average equivalent organic HAP emission rate does not exceed 0.04 kg organic HAP per kg coating material for an existing affected source or 0.016 kg organic HAP per kg coating material for a new affected source on a monthly average as-applied basis; or. (iii) Average equivalent organic HAP emission rate does not exceed the calculated limit based on emission limitations.	Follow the procedures set out in § 63.3370(h) to determine compliance with § 63.3320(b)(2) according to § 63.3370(o). Follow the procedures set out in § 63.3370(i). Show that the monthly organic HAP emission rate is less than the calculated equivalent allowable organic HAP emission rate (Equation 17 or 18 of § 63.3370) according to § 63.3370(o).
(8) Use of non-HAP coatings ...	All coatings for all coating lines at an affected source have organic HAP contents below 0.1 percent by mass for OSHA-defined carcinogens as specified in section A.6.4 of appendix A to 29 CFR 1910.1200, and below 1.0 percent by mass for other organic HAP compounds.	Follow the procedures set out in § 63.3370(s).

(b) *As-purchased “compliant” coating materials.* (1) If you comply by using coating materials that individually meet the emission standards in § 63.3320(b)(2) or (3), you must demonstrate that each coating material applied during the month at an existing affected source contains no more than 0.04 mass fraction organic HAP or 0.2 kg organic HAP per kg coating solids, and that each coating material applied during the month at a new affected source contains no more than 0.016 mass fraction organic HAP or 0.08 kg organic HAP per kg coating solids on an as-purchased basis as determined in accordance with § 63.3360(c).

(2) You are in compliance with emission standards in § 63.3320(b)(2) and (3) if each coating material applied at an existing affected source is applied as-purchased and contains no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg coating solids, and each coating material applied at a new affected source is applied as-purchased and contains no more than 0.016 kg organic HAP per kg coating material or 0.08 kg organic HAP per kg coating solids.

(c) *As-applied “compliant” coating materials.* If you comply by using coating materials that meet the emission

standards in § 63.3320(b)(2) or (3) as-applied, you must demonstrate compliance by following one of the procedures in paragraphs (c)(1) through (4) of this section. Compliance is determined in accordance with paragraph (c)(5) of this section.

(1) *Each coating material as-applied meets the mass fraction of coating material standard (§ 63.3320(b)(2)).* You must demonstrate that each coating material applied at an existing affected source during the month contains no more than 0.04 kg organic HAP per kg coating material applied, and each coating material applied at a new affected source contains no more than 0.016 kg organic HAP per kg coating material applied as determined in accordance with paragraphs (c)(1)(i) and (ii) of this section. You must calculate the as-applied organic HAP content of as-purchased coating materials which are reduced, thinned, or diluted prior to application.

(i) Determine the organic HAP content or volatile organic content of each coating material applied on an as-purchased basis in accordance with § 63.3360(c).

(ii) Calculate the as-applied organic HAP content of each coating material using Equation 4:

$$C_{ahi} = \frac{\left(C_{hi}M_i + \sum_{j=1}^q C_{hij}M_j \right)}{M_i + \sum_{j=1}^q M_j}$$

Equation 4

Where:

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.

C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

M_j = Mass of material, j, added to as-purchased coating material, i, in a month, kg. or calculate the as-applied volatile organic content of each coating material using Equation 5:

$$C_{avi} = \frac{\left(C_{vi}M_i + \sum_{j=1}^q C_{vij}M_j \right)}{M_i + \sum_{j=1}^q M_j}$$

Equation 5

Where:

C_{avi} = Monthly average, as-applied, volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.

C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.

M_j = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(2) *Each coating material as-applied meets the mass fraction of coating solids standard (§63.3320(b)(3)).* You must demonstrate that each coating material applied at an existing affected source contains no more than 0.20 kg of organic HAP per kg of coating solids applied and each coating material applied at a new affected source contains no more than 0.08 kg of organic HAP per kg of coating solids applied. You must demonstrate compliance in accordance with paragraphs (c)(2)(i) and (ii) of this section.

(i) Determine the as-applied coating solids content of each coating material following the procedure in §63.3360(d). You must calculate the as-applied coating solids content of coating materials which are reduced, thinned, or diluted prior to application, using Equation 6:

$$C_{asi} = \frac{\left(C_{si}M_i + \sum_{j=1}^q C_{sij}M_j \right)}{M_i + \sum_{j=1}^q M_j}$$

Equation 6

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Where:

- C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.

- C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass-fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(ii) Calculate the as-applied organic HAP to coating solids ratio using Equation 7:

$$H_{si} = \frac{C_{ahi}}{C_{asi}}$$

Equation 7

Where:

- H_{si} = As-applied, organic HAP to coating solids ratio of coating material, i.
- C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.
- C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

(3) *Monthly average organic HAP content of all coating materials as-applied is*

less than the mass percent limit (§ 63.3320(b)(2)). Demonstrate that the monthly average as-applied organic HAP content of all coating materials applied at an existing affected source is less than 0.04 kg organic HAP per kg of coating material applied, and all coating materials applied at a new affected source are less than 0.016 kg organic HAP per kg of coating material applied, as determined by Equation 8:

$$H_L = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret}}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}}$$

Equation 8

Where:

- H_L = Monthly average, as-applied, organic HAP content of all coating materials applied, expressed as kg organic HAP per kg of coating material applied, kg/kg.
- p = Number of different coating materials applied in a month.
- C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, kg/kg.
- M_i = Mass of as-purchased coating material, i, applied in a month, kg.
- q = Number of different materials added to the coating material.
- C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, kg/kg.
- M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.
- M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmos-

phere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in § 63.3370.

(4) *Monthly average organic HAP content of all coating materials as-applied is less than the mass fraction of coating solids limit (§ 63.3320(b)(3)). Demonstrate that the monthly average as-applied organic HAP content on the basis of coating solids applied of all coating materials applied at an existing affected source is less than 0.20 kg organic HAP per kg coating solids applied, and all coating materials applied at a new affected source are less than*

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0.08 kg organic HAP per kg coating solids applied, as determined by Equation 9:

$$H_s = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_j - M_{\text{vret}}}{\sum_{i=1}^p C_{si} M_i + \sum_{j=1}^q C_{sij} M_j}$$

Equation 9

Where:

H_s = Monthly average, as-applied, organic HAP to coating solids ratio, kg organic HAP/kg coating solids applied.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in § 63.3370.

C_{si} = Coating solids content of coating material, i , expressed as a mass fraction, kg/kg.

C_{sij} = Coating solids content of material, j , added to as-purchased coating material, i , expressed as a mass-fraction, kg/kg.

(5) The affected source is in compliance with emission standards in § 63.3320(b)(2) or (3) if:

(i) The organic HAP content of each coating material as-applied at an existing affected source is no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg coating solids, and the organic HAP content of each coating material as-applied at a new affected source contains no more than 0.016 kg organic HAP per kg coating material or 0.08 kg organic HAP per kg coating solids; or

(ii) The monthly average organic HAP content of all as-applied coating materials at an existing affected source are no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg coating solids, and the monthly average organic HAP content of all as-applied coating materials at a new affected source is no more than 0.016 kg organic HAP per kg coating material or 0.08 kg organic HAP per kg coating solids.

(d) *Monthly allowable organic HAP applied.* Demonstrate that the total monthly organic HAP applied as determined by Equation 10 is less than the calculated equivalent allowable organic HAP as determined by Equation 17 or 18 in paragraph (m) of this section:

$$H_m = \sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_j - M_{\text{vret}}$$

Equation 10

Where:

H_m = Total monthly organic HAP applied, kg.

p = Number of different coating materials applied in a month.

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C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in § 63.3370.

(e) *Accounting for volatile matter retained in the coated web or otherwise not emitted.* If you choose to use the equation in § 63.3360(g) to take into account volatile organic matter that is retained in the coated web or otherwise not emitted, you must identify each group of similar products that can utilize each site- and product-specific emission factor. Details regarding the test methods and calculations are provided in § 63.3360(g).

(f) *Capture and control to reduce emissions to no more than allowable limit (§ 63.3320(b)(1)).* Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent at an existing affected source and at least 98 percent at a new affected source for each month, or operate a capture system and oxidizer so that an outlet organic HAP concentration of no greater than 20 ppmv on a dry basis is achieved as long as the capture efficiency is 100 percent as detailed in § 63.3320(b)(4). Unless one of the cases described in paragraph (f)(1), (2), or (3) of this section applies to the affected source, you must either demonstrate compliance in accordance with the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device, or the procedure in paragraph (l) of this section when emissions are controlled by an oxidizer or demonstrate compliance for a web coating line by operating

each capture system and each control device and continuous parameter monitoring according to the procedures in paragraph (k) of this section.

(1) If the affected source has only always-controlled work stations and operates more than one capture system or more than one control device, you must demonstrate compliance in accordance with the provisions of either paragraph (o) or (q) of this section.

(2) If the affected source operates one or more never-controlled work stations or one or more intermittently-controlled work stations, you must demonstrate compliance in accordance with the provisions of paragraph (o) of this section.

(3) An alternative method of demonstrating compliance with § 63.3320(b)(1) is the installation of a PTE around the web coating line that achieves 100 percent capture efficiency and ventilation of all organic HAP emissions from the total enclosure to an oxidizer with an outlet organic HAP concentration of no greater than 20 ppmv on a dry basis. If this method is selected, you must demonstrate compliance by following the procedures in paragraphs (f)(3)(i) and (ii) of this section. Compliance is determined according to paragraph (f)(3)(iii) of this section.

(i) Demonstrate that a total enclosure is installed. An enclosure that meets the requirements in § 63.3360(f)(1) will be considered a total enclosure.

(ii) Determine the organic HAP concentration at the outlet of your total enclosure using the procedures in paragraph (f)(3)(ii)(A) or (B) of this section.

(A) Determine the control device efficiency using Equation 2 of § 63.3360 and the applicable test methods and procedures specified in § 63.3360(e).

(B) Use a CEMS to determine the organic HAP emission rate according to paragraphs (j)(2)(i) through (x) of this section.

(iii) You are in compliance if the installation of a total enclosure is demonstrated and the organic HAP concentration at the outlet of the incinerator is demonstrated to be no greater than 20 ppmv on a dry basis.

(g) *Capture and control to achieve mass fraction of coating solids applied limit*

(§ 63.3320(b)(3)). Operate a capture system and control device and limit the organic HAP emission rate from an existing affected source to no more than 0.20 kg organic HAP emitted per kg coating solids applied, and from a new affected source to no more than 0.08 kg organic HAP emitted per kg coating solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (o) of this section. Otherwise, you must demonstrate compliance following the procedure in paragraph (j) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (l) of this section when emissions are controlled by an oxidizer.

(h) *Capture and control to achieve mass fraction limit (§ 63.3320(b)(2))*. Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg coating material applied at an existing affected source, and no more than 0.016 kg organic HAP emitted per kg coating material applied at a new affected source as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (o) of this section. Otherwise, you must demonstrate compliance following the procedure in paragraph (j) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (l) of this section when emissions are controlled by an oxidizer.

(i) *Capture and control to achieve allowable emission rate*. Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with para-

graph (m) of this section. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (o) of this section. Otherwise, the owner or operator must demonstrate compliance following the procedure in paragraph (j) of this section when emissions from the affected source are controlled by a solvent recovery device or the procedure in paragraph (l) of this section when emissions are controlled by an oxidizer.

(j) *Solvent recovery device compliance demonstration*. If you use a solvent recovery device to control emissions, you must show compliance by following the procedures in either paragraph (j)(1) or (2) of this section:

(1) *Liquid-liquid material balance*. Perform a monthly liquid-liquid material balance as specified in paragraphs (j)(1)(i) through (v) of this section and use the applicable equations in paragraphs (j)(1)(vi) through (ix) of this section to convert the data to units of the selected compliance option in paragraphs (f) through (i) of this section. Compliance is determined in accordance with paragraph (j)(1)(x) of this section.

(i) Determine the mass of each coating material applied on the web coating line or group of web coating lines controlled by a common solvent recovery device during the month.

(ii) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as-applied during the month following the procedure in § 63.3360(c).

(iii) Determine the volatile organic content of each coating material as-applied during the month following the procedure in § 63.3360(d).

(iv) If demonstrating compliance on the basis of organic HAP emission rate

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based on coating solids applied or emission of less than the calculated allowable organic HAP, determine the coating solids content of each coating material applied during the month following the procedure in § 63.3360(d).

(v) Determine and monitor the amount of volatile organic matter recovered for the month according to the procedures in § 63.3350(d).

(vi) *Recovery efficiency.* Calculate the volatile organic matter collection and recovery efficiency using Equation 11:

$$R_v = \frac{M_v + M_{vret}}{\sum_{i=1}^p C_{vi} M_i + \sum_{i=1}^q C_{vij} M_{ij}} \times 100$$

Equation 11

Where:

R_v = Organic volatile matter collection and recovery efficiency, percent.

M_v = Mass of volatile matter recovered in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

p = Number of different coating materials applied in a month.

C_{vi} = Volatile organic content of coating material, i , expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{vij} = Volatile organic content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

(vii) *Organic HAP emitted.* Calculate the organic HAP emitted during the month using Equation 12:

$$H_e = \left[1 - \frac{R_v}{100} \right] \left[\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret} \right]$$

Equation 12

Where:

H_e = Total monthly organic HAP emitted, kg.

R_v = Organic volatile matter collection and recovery efficiency, percent.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i , applied in a month, kg.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, kg/kg.

M_{ij} = Mass of material, j , added to as-purchased coating material, i , in a month, kg.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

(viii) *Organic HAP emission rate based on coating solids applied.* Calculate the organic HAP emission rate based on coating solids applied using Equation 13:

$$L = \frac{H_e}{\sum_{i=1}^p C_{si}M_i + \sum_{j=1}^q C_{sj}M_{ij}}$$

Equation 13

Where:

L = Mass organic HAP emitted per mass of coating solids applied, kg/kg.

H_e = Total monthly organic HAP emitted, kg.

p = Number of different coating materials applied in a month.

C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

C_{sj} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass-fraction, kg/kg.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(ix) *Organic HAP emission rate based on coating materials applied.* Calculate the organic HAP emission rate based on coating material applied using Equation 14:

$$S = \frac{H_e}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}}$$

Equation 14

Where:

S = Mass organic HAP emitted per mass of material applied, kg/kg.

H_e = Total monthly organic HAP emitted, kg.

p = Number of different coating materials applied in a month.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

q = Number of different materials added to the coating material.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, kg.

(x) You are in compliance with the emission standards in § 63.3320(b) if:

(A) The volatile organic matter collection and recovery efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(B) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(C) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg

coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(D) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (m) of this section.

(2) *Continuous emission monitoring of capture system and control device performance.* Demonstrate initial compliance through a performance test on capture efficiency and continuing compliance through continuous emission monitors and continuous monitoring of capture system operating parameters following the procedures in paragraphs (j)(2)(i) through (vii) of this section. Use the applicable equations specified in paragraphs (j)(2)(viii) through (x) of this section to convert the monitoring and other data into units of the selected compliance option in paragraphs (f) through (i) of this section. Compliance is determined in accordance with paragraph (j)(2)(xi) of this section.

(i) *Control device efficiency.* Continuously monitor the gas stream entering and exiting the control device to determine the total organic volatile matter

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mass flow rate (*e.g.*, by determining the concentration of the vent gas in grams per cubic meter and the volumetric flow rate in cubic meters per second such that the total organic volatile matter mass flow rate in grams per second can be calculated) such that the control device efficiency of the control device can be calculated for each month using Equation 2 of § 63.3360.

(ii) *Capture efficiency monitoring.* Whenever a web coating line is oper-

ated, continuously monitor the operating parameters established in accordance with § 63.3350(f) to ensure capture efficiency.

(iii) Determine the percent capture efficiency in accordance with § 63.3360(f).

(iv) *Control efficiency.* Calculate the overall organic HAP control efficiency achieved for each month using Equation 15:

$$R = \frac{(E)(CE)}{100}$$

Equation 15

Where:

R = Overall organic HAP control efficiency, percent.

E = Organic volatile matter control efficiency of the control device, percent.

CE = Organic volatile matter capture efficiency of the capture system, percent.

(v) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating materials applied, or emission of less than the calculated allowable organic HAP, determine the mass of each coating material applied on the web coating line or group of web coating lines controlled by a common control device during the month.

(vi) If demonstrating compliance on the basis of organic HAP emission rate

based on coating solids applied, organic HAP emission rate based on coating material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as-applied during the month following the procedure in § 63.3360(c).

(vii) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied or emission of less than the calculated allowable organic HAP, determine the coating solids content of each coating material as-applied during the month following the procedure in § 63.3360(d).

(viii) *Organic HAP emitted.* Calculate the organic HAP emitted during the month for each month using Equation 16:

$$H_e = (1 - R) \left(\sum_{i=1}^p C_{ahi} M_i \right) - M_{\text{ret}}$$

Equation 16

Where:

H_e = Total monthly organic HAP emitted, kg.

R = Overall organic HAP control efficiency, percent.

p = Number of different coating materials applied in a month.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.

M_i = Mass of as-purchased coating material, i, applied in a month, kg.

M_{ret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

(ix) *Organic HAP emission rate based on coating solids applied.* Calculate the

organic HAP emission rate based on coating solids applied using Equation 13 of this section.

(x) *Organic HAP emission rate based on coating materials applied.* Calculate the organic HAP emission rate based on coating material applied using Equation 14 of this section.

(xi) *Compare actual performance to the performance required by compliance option.* The affected source is in compliance with the emission standards in § 63.3320(b) for each month if the capture system is operated such that the average capture system operating parameter is greater than or less than (as appropriate) the operating parameter value established in accordance with § 63.3350(f); and

(A) The organic volatile matter collection and recovery efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(B) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(C) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(D) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (m) of this section.

(k) *Capture and control system compliance demonstration procedures using a CPMS.* If you use an add-on control device, you must demonstrate initial compliance for each capture system and each control device through performance tests and demonstrate continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in paragraphs (k)(1) through (3) of this section. Compliance is determined in accordance with paragraph (k)(4) or (k)(5) of this section.

(1) Determine the control device destruction or removal efficiency using

the applicable test methods and procedures in § 63.3360(e).

(2) Determine the emission capture efficiency in accordance with § 63.3360(f).

(3) Whenever a web coating line is operated, continuously monitor the operating parameters established according to § 63.3350(e) and (f).

(4) *No operating limit deviations.* You are in compliance with the emission standards in § 63.3320(b) if the thermal oxidizer is operated such that the average combustion temperature does not fall more than 50 degrees Fahrenheit below the temperature established in accordance with § 63.3360(e)(3)(i) for each 3-hour period or if the catalytic oxidizer is operating such that the three-hour average temperature difference across the bed does not fall more than 80 percent of the average temperature established in accordance with § 63.3360(e)(3)(ii) and the minimum temperature is always 50 degrees Fahrenheit above the catalyst's ignition temperature, or the catalytic oxidizer average combustion temperature does not fall more than 50 °F below the temperature established in accordance with § 63.3360(e)(3)(ii) for each 3-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with § 63.3350(f); and

(i) The overall organic HAP control efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(ii) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(iii) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(iv) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (m) of this section.

(5) *Operating limit deviations.* If one or more operating limit deviations occurred during the monthly averaging period, compliance with the emission standards in § 63.3320(b) is determined by either assuming no control of emissions or by estimating the emissions using a control destruction efficiency curve during each 3-hour period that was a deviation. You are in compliance with the emission standards in § 63.3320(b) if, including the periods of deviations:

(i) The overall organic HAP control efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(ii) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(iii) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(iv) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (m) of this section.

(1) *Oxidizer compliance demonstration procedures.* If you use an oxidizer to control emissions to comply with this subpart, you must show compliance by following the procedures in paragraph (1)(1) of this section. Use the applicable equations specified in paragraph (1)(2) of this section to convert the monitoring and other data into units of the selected compliance option in paragraph (f) through (i) of this section. Compliance is determined in accordance with paragraph (1)(3) or (1)(4) of this section.

(1) Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in paragraphs (1)(1)(i) through (vi) of this section:

(i) Determine the oxidizer destruction efficiency using the procedure in § 63.3360(e).

(ii) Determine the capture system capture efficiency in accordance with § 63.3360(f).

(iii) *Capture and control efficiency monitoring.* Whenever a web coating line is operated, continuously monitor the operating parameters established in accordance with § 63.3350(e) and (f) to ensure capture and control efficiency.

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating materials applied, or emission of less than the calculated allowable organic HAP, determine the mass of each coating material applied on the web coating line or group of web coating lines controlled by a common oxidizer during the month.

(v) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied, organic HAP emission rate based on coating material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as applied during the month following the procedure in § 63.3360(c).

(vi) If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied or emission of less than the calculated allowable organic HAP, determine the coating solids content of each coating material applied during the month following the procedure in § 63.3360(d).

(2) Convert the information obtained under paragraph (q)(1) of this section into the units of the selected compliance option using the calculation procedures specified in paragraphs (1)(2)(i) through (iv) of this section.

(i) *Control efficiency.* Calculate the overall organic HAP control efficiency achieved using Equation 15.

(ii) *Organic HAP emitted.* Calculate the organic HAP emitted during the month using Equation 16.

(iii) *Organic HAP emission rate based on coating solids applied.* Calculate the organic HAP emission rate based on coating solids applied for each month using Equation 13.

(iv) *Organic HAP emission rate based on coating materials applied.* Calculate the organic HAP emission rate based on coating material applied using Equation 14.

(3) *No operating limit deviations.* You are in compliance with the emission standards in § 63.3320(b) if the oxidizer is operated such that the average combustion temperature does not fall more than 50 degrees Fahrenheit below the temperature established in accordance with § 63.3360(e)(3)(i) for each 3-hour period, or the catalytic oxidizer average combustion temperature does not fall more than 50 degrees Fahrenheit below the temperature established in accordance with § 63.3360(e)(3)(ii) for each 3-hour period or the temperature difference across the bed does not fall more than 80 percent of the average temperature established in accordance with § 63.3360(e)(3)(ii) and the minimum temperature is always 50 degrees Fahrenheit above the catalyst's ignition temperature, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with § 63.3350(f); and

(i) The overall organic HAP control efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(ii) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(iii) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(iv) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (m) of this section.

(4) *Operating limit deviations.* If one or more operating limit deviations occurred during the monthly averaging period, compliance with the emission standards in § 63.3320(b) is determined by assuming no control of emissions or

by estimating the emissions using a control destruction efficiency curve during each 3-hour period that was a deviation. You are in compliance with the emission standards in § 63.3320(b) if, including the periods of deviation:

(i) The overall organic HAP control efficiency is 95 percent or greater at an existing affected source and 98 percent or greater at a new affected source; or

(ii) The organic HAP emission rate based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(iii) The organic HAP emission rate based on coating material applied is no more than 0.04 kg organic HAP per kg coating material applied at an existing affected source and no more than 0.016 kg organic HAP per kg coating material applied at a new affected source; or

(iv) The organic HAP emitted during the month is less than the calculated allowable organic HAP as determined using paragraph (m) of this section.

(m) *Monthly allowable organic HAP emissions.* This paragraph provides the procedures and calculations for determining monthly allowable organic HAP emissions for use in demonstrating compliance in accordance with paragraph (d), (i), (j)(1)(x)(D), (j)(2)(xi)(D), or (1)(3)(iv) of this section. You will need to determine the amount of coating material applied at greater than or equal to 20 mass percent coating solids and the amount of coating material applied at less than 20 mass percent coating solids. The allowable organic HAP limit is then calculated based on coating material applied at greater than or equal to 20 mass percent coating solids complying with 0.2 kg organic HAP per kg coating solids at an existing affected source or 0.08 kg organic HAP per kg coating solids at a new affected source, and coating material applied at less than 20 mass percent coating solids complying with 4 mass percent organic HAP at an existing affected source and 1.6 mass-percent organic HAP at a new affected source as follows:

(1) Determine the as-purchased mass of each coating material applied each month.

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(2) Determine the as-purchased coating solids content of each coating material applied each month in accordance with § 63.3360(d)(1).

(3) Determine the as-purchased mass fraction of each coating material which was applied at 20 mass percent or greater coating solids content on an as-applied basis.

(4) Determine the total mass of each solvent, diluent, thinner, or reducer added to coating materials which were applied at less than 20 mass percent coating solids content on an as-applied basis each month.

(5) Calculate the monthly allowable organic HAP emissions using Equation 17 for an existing affected source:

$$H_a = 0.20 \left[\sum_{i=1}^p M_i G_i C_{si} \right] + 0.04 \left[\sum_{i=1}^p M_i (1 - G_i) + \sum_{j=1}^q M_{L_j} \right]$$

Equation 17

Where:

- H_a = Monthly allowable organic HAP emissions, kg.
- p = Number of different coating materials applied in a month.
- M_i = mass of as-purchased coating material, i, applied in a month, kg.
- G_i = Mass fraction of each coating material, i, which was applied at 20 mass percent or greater coating solids content, on an as-applied basis, kg/kg.
- C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.

q = Number of different materials added to the coating material.

M_{Lj} = Mass of non-coating-solids-containing coating material, j, added to coating-solids-containing coating materials which were applied at less than 20 mass percent coating solids content, on an as-applied basis, in a month, kg.

or Equation 18 for a new affected source:

$$H_a = 0.08 \left[\sum_{i=1}^p M_i G_i C_{si} \right] + 0.016 \left[\sum_{i=1}^p M_i (1 - G_i) + \sum_{j=1}^q M_{L_j} \right]$$

Equation 18

Where:

- H_a = Monthly allowable organic HAP emissions, kg.
 - p = Number of different coating materials applied in a month.
 - M_i = Mass of as-purchased coating material, i, applied in a month, kg.
 - G_i = Mass fraction of each coating material, i, which was applied at 20 mass percent or greater coating solids content, on an as-applied basis, kg/kg.
 - C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, kg/kg.
 - q = Number of different materials added to the coating material.
 - M_{Lj} = Mass of non-coating-solids-containing coating material, j, added to coating-solids-containing coating materials which were applied at less than 20 mass percent coating solids content, on an as-applied basis, in a month, kg.
- (n) [Reserved]

(o) *Combinations of capture and control.* If you operate more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, you must calculate organic HAP emissions according to the procedures in paragraphs (o)(1) through (4) of this section, and use the calculation procedures specified in paragraph (o)(5) of this section to convert the monitoring and other data into units of the selected control option in paragraphs (f) through (i) of this section. Use the procedures specified in paragraph (o)(6) of this section to demonstrate compliance.

(1) *Solvent recovery system using liquid-liquid material balance compliance demonstration.* If you choose to comply by

means of a liquid-liquid material balance for each solvent recovery system used to control one or more web coating lines, you must determine the organic HAP emissions for those web coating lines controlled by that solvent recovery system either:

(i) In accordance with paragraphs (j)(1)(i) through (iii) and (v) through (vii) of this section, if the web coating lines controlled by that solvent recovery system have only always-controlled work stations; or

(ii) In accordance with paragraphs (j)(1)(ii), (iii), (v), and (vi) and (p) of this section, if the web coating lines controlled by that solvent recovery system have one or more never-controlled or intermittently-controlled work stations.

(2) *Solvent recovery system using performance test compliance demonstration and CEMS.* To demonstrate compliance through an initial test of capture efficiency, continuous monitoring of a capture system operating parameter, and a CEMS on each solvent recovery system used to control one or more web coating lines, you must:

(i) For each capture system delivering emissions to that solvent recovery system, monitor the operating parameter established in accordance with § 63.3350(f) to ensure capture system efficiency; and

(ii) Determine the organic HAP emissions for those web coating lines served by each capture system delivering emissions to that solvent recovery system either:

(A) In accordance with paragraphs (j)(2)(i) through (iii), (v), (vi), and (viii) of this section, if the web coating lines served by that capture and control system have only always-controlled work stations; or

(B) In accordance with paragraphs (j)(2)(i) through (iii), (vi), and (p) of this section, if the web coating lines served by that capture and control system have one or more never-controlled or intermittently-controlled work stations.

(3) *Oxidizer.* To demonstrate compliance through performance tests of capture efficiency and control device efficiency, continuous monitoring of capture system, and CPMS for control device operating parameters for each oxi-

dizer used to control emissions from one or more web coating lines, you must:

(i) Monitor the operating parameter in accordance with § 63.3350(e) to ensure control device efficiency; and

(ii) For each capture system delivering emissions to that oxidizer, monitor the operating parameter established in accordance with § 63.3350(f) to ensure capture efficiency; and

(iii) Determine the organic HAP emissions for those web coating lines served by each capture system delivering emissions to that oxidizer either:

(A) In accordance with paragraphs (1)(1)(i) through (vi) of this section, if the web coating lines served by that capture and control system have only always-controlled work stations; or

(B) In accordance with paragraphs (1)(1)(i) through (iii), (v), and (p) of this section, if the web coating lines served by that capture and control system have one or more never-controlled or intermittently-controlled work stations.

(4) *Uncontrolled coating lines.* If you own or operate one or more uncontrolled web coating lines, you must determine the organic HAP applied on those web coating lines using Equation 10. The organic HAP emitted from an uncontrolled web coating line is equal to the organic HAP applied on that web coating line.

(5) Convert the information obtained under paragraphs (o)(1) through (4) of this section into the units of the selected compliance option using the calculation procedures specified in paragraphs (o)(5)(i) through (iv) of this section.

(i) *Organic HAP emitted.* Calculate the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (o)(1), (o)(2)(ii), (o)(3)(iii), and (o)(4) of this section.

(ii) *Coating solids applied.* If demonstrating compliance on the basis of organic HAP emission rate based on coating solids applied or emission of less than the calculated allowable organic HAP, the owner or operator must determine the coating solids content of each coating material applied during the month following the procedure in § 63.3360(d).

(iii) *Organic HAP emission rate based on coating solids applied.* Calculate the organic HAP emission rate based on coating solids applied for each month using Equation 13.

(iv) *Organic HAP based on materials applied.* Calculate the organic HAP emission rate based on material applied using Equation 14.

(6) *Compliance.* The affected source is in compliance with the emission standards in § 63.3320(b) for the month if all operating parameters required to be monitored under paragraphs (o)(1) through (3) of this section were maintained at the values established under §§ 63.3350 and 63.3360 and one of the standards in paragraphs (o)(6)(i) through (iv) of this section were met. If operating parameter deviations occurred, the affected source is in compliance with the emission standards in § 63.3320(b) for the month if, assuming no control of emissions or by estimating the emissions using a control destruction efficiency curve for each 3-hour deviation period, one of the standards in paragraphs (6)(i) through (iv) of this section were met.

(i) The total mass of organic HAP emitted by the affected source based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(ii) The total mass of organic HAP emitted by the affected source based on material applied is no more than 0.04 kg organic HAP per kg material applied at an existing affected source and no more than 0.016 kg organic HAP per kg material applied at a new affected source; or

(iii) The total mass of organic HAP emitted by the affected source during

the month is less than the calculated allowable organic HAP as determined using paragraph (m) of this section; or

(iv) The total mass of organic HAP emitted by the affected source was not more than 5 percent of the total mass of organic HAP applied for the month at an existing affected source and no more than 2 percent of the total mass of organic HAP applied for the month at a new affected source. The total mass of organic HAP applied by the affected source in the month must be determined using Equation 10.

(p) *Intermittently-controlled and never-controlled work stations.* If you have been expressly referenced to this paragraph by paragraph (o)(1)(ii), (o)(2)(ii)(B), or (o)(3)(iii)(B) of this section for calculation procedures to determine organic HAP emissions for your intermittently-controlled and never-controlled work stations, you must:

(1) Determine the sum of the mass of all coating materials as-applied on intermittently-controlled work stations operating in bypass mode and the mass of all coating materials as-applied on never-controlled work stations during the month.

(2) Determine the sum of the mass of all coating materials as-applied on intermittently-controlled work stations operating in a controlled mode and the mass of all coating materials applied on always-controlled work stations during the month.

(3) *Liquid-liquid material balance compliance demonstration.* For each web coating line or group of web coating lines for which you use the provisions of paragraph (o)(1)(ii) of this section, you must calculate the organic HAP emitted during the month using Equation 19 of this section:

$$H_e = \left[\sum_{i=1}^p M_{ci} C_{ski} \right] \left[1 - \frac{R_v}{100} \right] + \left[\sum_{i=1}^p M_{Bi} C_{ski} \right] - M_{wret}$$

Equation 19

Where:

H_e = Total monthly organic HAP emitted, kg.
 p = Number of different coating materials applied in a month.

M_{ci} = Sum of the mass of coating material, i , as-applied on intermittently-controlled work stations operating in controlled mode and the mass of coating material, i ,

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as-applied on always-controlled work stations, in a month, kg.
 C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.
 R_v = Organic volatile matter collection and recovery efficiency, percent.
 M_{Bi} = Sum of the mass of coating material, i, as-applied on intermittently-controlled work stations operating in bypass mode and the mass of coating material, i, as-applied on never-controlled work stations, in a month, kg.
 C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.
 M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

where, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

(4) *Performance test to determine capture efficiency and control device efficiency.* For each web coating line or group of web coating lines for which you use the provisions of paragraph (o)(2)(ii)(B) or (o)(3)(iii)(B) of this section, you must calculate the organic HAP emitted during the month using Equation 20:

$$H_e = \left[\sum_{i=1}^p M_{ci} C_{ahi} \right] \left[1 - \frac{R}{100} \right] + \left[\sum_{i=1}^p M_{Bi} C_{ahi} \right] - M_{vret}$$

Equation 20

Where:

H_e = Total monthly organic HAP emitted, kg.
 p = Number of different coating materials applied in a month.
 M_{ci} = Sum of the mass of coating material, i, as-applied on intermittently-controlled work stations operating in controlled mode and the mass of coating material, i, as-applied on always-controlled work stations, in a month, kg.
 C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.
 R = Overall organic HAP control efficiency, percent.
 M_{Bi} = Sum of the mass of coating material, i, as-applied on intermittently-controlled work stations operating in bypass mode and the mass of coating material, i, as-applied on never-controlled work stations, in a month, kg.
 C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, kg/kg.
 M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in this section.

capture system or more than one control device and only have always-controlled work stations, then you are in compliance with the emission standards in §63.3320(b)(1) for the month if for each web coating line or group of web coating lines controlled by a common control device:

(1) The volatile matter collection and recovery efficiency as determined by paragraphs (j)(1)(i), (iii), (v), and (vi) of this section is at least 95 percent at an existing affected source and at least 98 percent at a new affected source; or

(2) The overall organic HAP control efficiency as determined by paragraphs (j)(2)(i) through (iv) of this section for each web coating line or group of web coating lines served by that control device and a common capture system is at least 95 percent at an existing affected source and at least 98 percent at a new affected source; or

(3) The overall organic HAP control efficiency as determined by paragraphs (1)(1)(i) through (iii) and (1)(2)(i) of this section for each web coating line or group of web coating lines served by that control device and a common capture system is at least 95 percent at an existing affected source and at least 98 percent at a new affected source.

(r) *Mass-balance approach.* As an alternative to §63.3370(b) through (p), you

(q) *Always-controlled work stations with more than one capture and control system.* If you operate more than one

may demonstrate monthly compliance using a mass-balance approach in accordance with this section, except for any month that you elect to meet the emission limitation in § 63.3320(b)(4). The mass-balance approach should be performed as follows:

(1) Separately for each individual/grouping(s) of lines, you must sum the mass of organic HAP emitted during the month and divide by the corresponding total mass of all organic HAP applied on the lines, or total mass of coating materials applied on the lines, or total mass of coating solids applied on the lines, for the same period, in accordance with the emission limitation that you have elected at § 63.3320(b)(1) through (3) for the month's demonstration. You may also choose to use volatile organic content as a surrogate for organic HAP for the compliance demonstration in accordance with § 63.3360(d). You are required to include all emissions and inputs that occur during periods that each line or grouping of lines operates in accordance with the applicability criteria in § 63.3300.

(2) You must include all of the organic HAP emitted by your individual/grouping(s) of lines, as follows.

(i) You must record the mass of organic HAP or volatile organic content utilized at all work stations of all of your individually/grouping(s) of lines. You must additionally record the mass of all coating materials applied at these work stations if you are demonstrating compliance for the month with the emission limitation at § 63.3320(b)(2) (the "coating materials" option). You must additionally record the mass of all coating solids applied at these work stations if you are demonstrating compliance for the month with the emission limitation at § 63.3320(b)(3) (the "coating solids" option).

(ii) You must assume that all of the organic HAP input to all never-controlled work stations is emitted, unless you have determined an emission factor in accordance with § 63.3360(g).

(iii) For all always-controlled work stations, you must assume that all of the organic HAP or volatile organic content is emitted, less the reductions provided by the corresponding capture

system and control device, in accordance with the most recently measured capture and destruction efficiencies, or in accordance with the measured mass of volatile organic compounds (VOC) recovered for the month (*e.g.*, carbon control or condensers). You may account for organic HAP or volatile organic content retained in the coated web or otherwise not emitted if you have determined an emission factor in accordance with § 63.3360(g).

(iv) For all intermittently-controlled work stations, you must assume that all of the organic HAP or volatile organic content is emitted during periods of no control. During periods of control, you must assume that all of the organic HAP or volatile organic content is emitted, less the reductions provided by the corresponding capture system and control device, in accordance with the most recently measured capture and destruction efficiencies, or in accordance with the measured mass of VOC recovered for the month (*e.g.*, carbon control or condensers). You may account for organic HAP or volatile organic content retained in the coated web or otherwise not emitted if you have determined an emission factor in accordance with § 63.3360(g).

(v) You must record the organic HAP or volatile organic content input to all work stations of your individual/grouping(s) of lines and the mass of coating materials and/or solids applied, if applicable, and determine corresponding emissions during all periods of operation, including malfunctions or startups and shutdowns of any web coating line or control device.

(3) You are in compliance with the emission standards in § 63.3320(b) if each of your individual/grouping(s) of lines, meets one of the requirements in paragraphs (r)(3)(i) through (iii) of this section, as applicable. If operating parameter limit deviations occurred, including periods that the oxidizer control device(s), if any, operated at an average combustion temperature more than 50 degrees Fahrenheit below the temperature established in accordance with § 63.3360(e), or the 3-hour average temperature difference across the catalyst bed at no less than 80 percent of this average temperature differential and the catalytic oxidizer maintained a

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minimum temperature 50 degrees Fahrenheit above the catalyst's ignition temperature, you are in compliance with the emission standards in § 63.3320(b) for the month, if assuming no control of emissions for each 3-hour deviation period (or in accordance with an alternate approved method), one of the requirements in paragraphs (r)(3)(i) through (iii) of this section was met.

(i) The total mass of organic HAP emitted by the affected source based on HAP applied is no more than 0.05 kg organic HAP per kg HAP applied at an existing affected source and no more than 0.02 kg organic HAP per kg HAP applied at a new affected source; or

(ii) The total mass of organic HAP emitted by the affected source based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied at an existing affected source and no more than 0.08 kg organic HAP per kg coating solids applied at a new affected source; or

(iii) The total mass of organic HAP emitted by the affected source based on material applied is no more than 0.04 kg organic HAP per kg material applied at an existing affected source and no more than 0.016 kg organic HAP per kg material applied at a new affected source.

(s) *Non-HAP coating.* You must demonstrate that all of the coatings applied at all of the web coating lines at the affected source have organic HAP contents below 0.1 percent by mass for OSHA-defined carcinogens as specified in section A.6.4 of appendix A to 29 CFR 1910.1200, and below 1.0 percent by mass for other organic HAP compounds using the procedures in § 63.3370(s)(1) through (3).

(1) Determine the organic HAP mass fraction of each coating material "as purchased" by following one of the procedures in paragraphs § 63.3360(c)(1) through (3) and determine the organic HAP mass fraction of each coating material "as applied" by following the procedures in paragraph § 63.3360(c)(4).

(2) Submit to your permitting authority a report certifying that all coatings applied at all of the web coating lines at your affected source are non-HAP coatings.

(3) Maintain records of coating formulations used as required in § 63.3410(a)(1)(iii).

(4) Resume reporting requirements if any of the coating formulations are modified to exceed the thresholds in § 63.3370(s) or new coatings which exceed the thresholds in paragraph (s) of this section are used.

[67 FR 72341, Dec. 4, 2002, as amended at 85 FR 41301, July 9, 2020]

NOTIFICATIONS, REPORTS, AND RECORDS

§ 63.3400 What notifications and reports must I submit?

(a) *Reports.* Each owner or operator of an affected source subject to this subpart must submit the reports specified in paragraphs (b) through (k) of this section to the Administrator.

(b) *Initial notifications.* You must submit an initial notification as required by § 63.9(b), using the procedure in § 63.3400(h).

(1) Initial notification for existing affected sources must be submitted no later than 1 year before the compliance date specified in § 63.3330(a), or no later than 120 days after the source becomes subject to this subpart, whichever is later.

(2) Initial notification for new and reconstructed affected sources must be submitted as required by § 63.9(b).

(3) For the purpose of this subpart, a title V or part 70 permit application may be used in lieu of the initial notification required under § 63.9(b), provided the same information is contained in the permit application as required by § 63.9(b) and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA to implement and enforce this subpart.

(4) If you are using a permit application in lieu of an initial notification in accordance with paragraph (b)(3) of this section, the permit application must be submitted by the same due date specified for the initial notification.

(c) You must submit a semiannual compliance report according to paragraphs (c)(1) and (2) of this section.

(1) Compliance report dates.

(i) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.3330 and ending on June 30 or December 31, whichever date is the first date following the end of the calendar half immediately following the compliance date that is specified for your affected source in § 63.3330.

(ii) The first compliance report is due no later than July 31 or January 31, whichever date follows the end of the calendar half immediately following the compliance date that is specified for your affected source in § 63.3330. Prior to the electronic template being available in CEDRI for one year, the report must be postmarked or delivered by the aforementioned dates. After the electronic template has been available in CEDRI for 1 year, the next full report must be submitted electronically as described in paragraph (h) of this section.

(iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iv) Each subsequent compliance report must be submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(v) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and the permitting authority has established dates for submitting semiannual reports pursuant to § 70.6(a)(3)(iii)(A) or § 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (c)(1)(i) through (iv) of this section.

(2) *Compliance report contents.* The compliance report must contain the information in paragraphs (c)(2)(i) through (viii) of this section:

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature certifying the accuracy of the content of the report.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) If there are no deviations from any emission limitations (emission limit or operating limit) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period, and that no CMS was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(v) For each deviation from an emission limitation (emission limit or operating limit) that applies to you and that occurs at an affected source where you are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the following information:

(A) The total operating time of the web coating line(s) during the reporting period.

(B) Information on the number, duration, and cause of deviations (including unknown cause), if applicable, and the corrective action taken.

(C) An estimate of the quantity of each regulated pollutant emitted over the emission limits in § 63.3320 for each monthly period covered in the report if the source failed to meet an applicable emission limit of this subpart.

(vi) For each deviation from an emission limit occurring at an affected source where you are using a CEMS or CPMS to comply with the emission limit in this subpart, you must include the following information:

(A) The total operating time of the web coating line(s) during the reporting period.

(B) The date and time that each CEMS and CPMS, if applicable, was inoperative except for zero (low-level) and high-level checks.

(C) The date and time that each CEMS and CPMS, if applicable, was out-of-control, including the information in § 63.8(c)(8).

(D) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(E) A summary of the total duration (in hours) of each deviation during the reporting period and the total duration of each deviation as a percent of the

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total source operating time during that reporting period.

(F) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(G) A summary of the total duration (in hours) of CEMS and/or CPMS downtime during the reporting period and the total duration of CEMS and/or CPMS downtime as a percent of the total source operating time during that reporting period.

(H) A breakdown of the total duration of CEMS and/or CPMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(I) The date of the latest CEMS and/or CPMS certification or audit.

(J) A description of any changes in CEMS, CPMS, or controls since the last reporting period.

(K) An estimate of the quantity of each regulated pollutant emitted over the emission limits in § 63.3320 for each monthly period covered in the report if the source failed to meet an applicable emission limit of this subpart.

(d) You must submit a Notification of Performance Tests as specified in §§ 63.7 and 63.9(e) if you are complying with the emission standard using a control device and you are required to conduct a performance test of the control device. This notification and the site-specific test plan required under § 63.7(c)(2) must identify the operating parameters to be monitored to ensure that the capture efficiency of the capture system and the control efficiency of the control device determined during the performance test are maintained. Unless EPA objects to the parameter or requests changes, you may consider the parameter approved.

(e) *Notification of Compliance Status.* You must submit a Notification of Compliance Status as specified in § 63.9(h). For affected sources that commence construction or reconstruction after September 19, 2019, the Notifica-

tion of Compliance Status must be submitted electronically using the procedure in paragraph (h) of this section. For affected sources that commenced construction or reconstruction on or before September 19, 2019, the Notification of Compliance Status must be submitted electronically using the procedure in paragraph (h) starting July 9, 2021.

(f) *Performance test reports.* You must submit performance test reports as specified in § 63.10(d)(2) if you are using a control device to comply with the emission standard and you have not obtained a waiver from the performance test requirement or you are not exempted from this requirement by § 63.3360(b). Catalyst activity test results are not required to be submitted but must be maintained onsite. Within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (f)(1) through (3) of this section. For affected sources that commence construction or reconstruction after September 19, 2019, the performance test reports must be submitted electronically using the procedure in paragraph (h) of this section. For affected sources that commenced construction or reconstruction on or before September 19, 2019, the performance test reports must be submitted electronically using the procedure in paragraph (h) starting July 9, 2021.

(1) *Data collected using test methods supported by EPA's Electronic Reporting Tool (ERT) as listed on EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test.* Submit the results of the performance test to EPA via CEDRI, which can be accessed through EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on EPA's ERT website.

(2) *Data collected using test methods that are not supported by EPA's ERT as listed on EPA's ERT website at the time of*

the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the ERT generated package or alternative file to EPA via CEDRI.

(3) *Confidential business information (CBI).* If you claim some of the information submitted under paragraph (f)(1) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to EPA. The file must be generated through the use of EPA's ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to EPA via EPA's CDX as described in paragraph (f)(1) of this section.

(g) *Performance evaluation reports.* You must submit the results of performance evaluations within 60 days of completing each CMS performance evaluation (as defined in §63.2) following the procedures specified in paragraphs (g)(1) through (3) of this section. For affected sources that commence construction or reconstruction after September 19, 2019, the performance evaluation reports must be submitted electronically using the procedure in paragraph (h) of this section. For affected sources that commenced construction or reconstruction on or before September 19, 2019, the performance evaluation reports must be submitted electronically using the procedure in paragraph (h) starting July 9, 2021.

(1) *Performance evaluations of CMS measuring relative accuracy test audit (RATA) pollutants that are supported by EPA's ERT as listed on EPA's ERT website at the time of the evaluation.* Submit the results of the performance evaluation to EPA via CEDRI, which can be accessed through EPA's CDX. The data must be submitted in a file format generated through the use of

EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on EPA's ERT website.

(2) *Performance evaluations of CMS measuring RATA pollutants that are not supported by EPA's ERT as listed on EPA's ERT website at the time of the evaluation.* The results of the performance evaluation must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the ERT generated package or alternative file to EPA via CEDRI.

(3) *Confidential business information (CBI).* If you claim some of the information submitted under paragraph (g)(1) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to EPA. The file must be generated through the use of EPA's ERT or an alternate electronic file consistent with the XML schema listed on EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to EPA via EPA's CDX as described in paragraph (g)(1) of this section.

(h) *Electronic reporting.* If you are required to submit reports following the procedure specified in this paragraph, you must submit reports to EPA via CEDRI, which can be accessed through EPA's CDX (<https://cdx.epa.gov/>). Initial notifications and notifications of compliance status must be submitted as portable document formats (PDF) to CEDRI using the attachment module of the ERT. You must use the semiannual compliance report template on the CEDRI website ([https://www.epa.gov/electronic-reporting-air-emissions-compliance-and-emissions-data-reporting-interface-cedri](https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri)) for this subpart 1 year after it becomes available. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which

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the report is submitted. If you claim some of the information required to be submitted via CEDRI is CBI, submit a complete report, including information claimed to be CBI to EPA. The report must be generated using the appropriate form on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to EPA via EPA's CDX as described earlier in this paragraph.

(i) *Extension for CDX/CEDRI outage.* If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (i)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning 5 business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the

reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(j) *Extension for force majeure events.* If you are required to electronically submit a report through CEDRI in EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (j)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

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(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(k) *SSM reports.* For affected sources that commenced construction or reconstruction before September 19, 2019, you must submit SSM reports as specified in § 63.10(d)(5), except that the provisions in subpart A of this part pertaining to startups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart. On and after, July 9, 2021, and for affected sources that commence construction or reconstruction after September 19, 2019, this section is no longer relevant.

(1) If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not consistent with the procedures specified in the affected source's SSMP required by § 63.6(e)(3), the owner or operator must state such information in the report. The startup, shutdown, or malfunction report must consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy and must be submitted to the Administrator.

(2) Separate startup, shutdown, and malfunction reports are not required if the information is included in the report specified in paragraph (c)(2)(vi) of this section.

[67 FR 72341, Dec. 4, 2002, as amended at 85 FR 41313, July 9, 2020; 85 FR 73905, Nov. 19, 2020]

§ 63.3410 What records must I keep?

(a) Each owner or operator of an affected source subject to this subpart must maintain the records specified in paragraphs (a)(1) and (2) of this section on a monthly basis in accordance with the requirements of § 63.10(b)(1):

(1) Records specified in § 63.10(b)(2) of all measurements needed to dem-

onstrate compliance with this standard as indicated in Table 2 to subpart JJJJ of part 63, including:

(i) Continuous emission monitor data in accordance with the requirements of § 63.3350(d);

(ii) Control device and capture system operating parameter data in accordance with the requirements of § 63.3350(c), (e), and (f);

(iii) Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of § 63.3360(c);

(iv) Volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of § 63.3360(d);

(v) Overall control efficiency determination using capture efficiency and control device destruction or removal efficiency test results in accordance with the requirements of § 63.3360(e) and (f);

(vi) Material usage, organic HAP usage, volatile matter usage, and coating solids usage and compliance demonstrations using these data in accordance with the requirements of § 63.3370(b), (c), and (d); and

(vii) Emission factor development calculations and HAP content for coating materials used to develop the emission factor as needed for § 63.3360(g).

(2) Records specified in § 63.10(c) for each CMS operated by the owner or operator in accordance with the requirements of § 63.3350(b), as indicated in Table 2 to subpart JJJJ of part 63.

(b) Each owner or operator of an affected source subject to this subpart must maintain records of all liquid-liquid material balances performed in accordance with the requirements of § 63.3370. The records must be maintained in accordance with the applicable requirements of § 63.10(b).

(c) For each deviation from an operating limit occurring at an affected source, you must record the following information.

(1) The total operating time the web coating line(s) controlled by the corresponding add-on control device and/or emission capture system during the reporting period.

(2) Date, time, duration, and cause of the deviations.

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(3) If the facility determines by its monthly compliance demonstration, in accordance with § 63.3370, as applicable, that the source failed to meet an applicable emission limit of this subpart, you must record the following for the corresponding affected equipment:

(i) Record an estimate of the quantity of HAP (or VOC if used a surrogate in accordance with § 63.3360(d)) emitted in excess of the emission limit for the month, and a description of the method used to estimate the emissions.

(ii) Record actions taken to minimize emissions in accordance with § 63.3340(a), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(d) Records of results from the annual catalyst activity test, if applicable.

(e) Any records required to be maintained by this part that are submitted electronically via EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a dele-

gated air agency or the EPA as part of an on-site compliance evaluation.

[85 FR 41316, July 9, 2020]

DELEGATION OF AUTHORITY

§ 63.3420 What authorities may be delegated to the States?

(a) In delegating implementation and enforcement authority to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (b) of this section must be retained by the EPA Administrator and not transferred to a state, local, or tribal agency.

(b) Authority which will not be delegated to state, local, or tribal agencies are listed in paragraphs (b)(1) and (2) of this section:

(1) Approval of alternate test method for organic HAP content determination under § 63.3360(c).

(2) Approval of alternate test method for volatile matter determination under § 63.3360(d).

[85 FR 41316, July 9, 2020]

TABLE 1 TO SUBPART JJJJ OF PART 63—OPERATING LIMITS IF USING ADD-ON CONTROL DEVICES AND CAPTURE SYSTEM

If you are required to comply with operating limits by § 63.3321, 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 operating limits by:
1. Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall more than 50 °F below the combustion temperature limit established according to § 63.3360(e)(3)(i).	i. Collecting the combustion temperature data according to § 63.3350(e)(10); ii. Reducing the data to 3-hour block averages; and iii. Maintain the 3-hour average combustion temperature at or above the temperature limit.
2. Catalytic oxidizer	a. The average temperature at the inlet to the catalyst bed in any 3-hour period must not fall more than 50 degrees Fahrenheit below the combustion temperature limit established according to § 63.3360(e)(3)(ii). b. The temperature rise across the catalyst bed must not fall below 80 percent of the limit established according to § 63.3360(e)(3)(ii), provided that the minimum temperature is always 50 degrees Fahrenheit above the catalyst's ignition temperature.	i. Collecting the catalyst bed inlet temperature data according to § 63.3350(e)(10); ii. Reducing the data to 3-hour block averages; and iii. Maintain the 3-hour average catalyst bed inlet temperature at or above the temperature limit. i. Collecting the catalyst bed inlet and outlet temperature data according to § 63.3350(e)(10); ii. Reducing the data to 3-hour block averages; and iii. Maintain the 3-hour average temperature rise across the catalyst bed at or above the limit, and maintain the minimum temperature at least 50 degrees Fahrenheit above the catalyst's ignition temperature
3. Emission capture system.	Submit monitoring plan to the Administrator that identifies operating parameters to be monitored according to § 63.3350(f).	Conduct monitoring according to the plan (§ 63.3350(f)(3)).

[85 FR 41316, July 9, 2020]

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TABLE 2 TO SUBPART JJJJ OF PART 63—APPLICABILITY OF 40 CFR PART 63 GENERAL PROVISIONS TO SUBPART JJJJ

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

General provisions reference	Applicable to subpart JJJJ	Explanation
§ 63.1(a)(1)–(4)	Yes.	
§ 63.1(a)(5)	No	Reserved.
§ 63.1(a)(6)–(8)	Yes.	
§ 63.1(a)(9)	No	Reserved.
§ 63.1(a)(10)–(14)	Yes.	
§ 63.1(b)(1)	No	Subpart JJJJ specifies applicability.
§ 63.1(b)(2)–(3)	Yes.	
§ 63.1(c)(1)	Yes.	
§ 63.1(c)(2)	No	Area sources are not subject to emission standards of subpart JJJJ.
§ 63.1(c)(3)	No	Reserved.
§ 63.1(c)(4)	Yes.	
§ 63.1(c)(5)	Yes.	
§ 63.1(c)(6)	Yes.	
§ 63.1(d)	No	Reserved.
§ 63.1(e)	Yes.	
§ 63.2	Yes	Additional definitions in subpart JJJJ.
§ 63.3(a)–(c)	Yes.	
§ 63.4(a)(1)–(3)	Yes.	
§ 63.4(a)(4)	No	Reserved.
§ 63.4(a)(5)	Yes.	
§ 63.4(b)–(c)	Yes.	
§ 63.5(a)(1)–(2)	Yes.	
§ 63.5(b)(1)	Yes.	
§ 63.5(b)(2)	No	Reserved.
§ 63.5(b)(3)–(6)	Yes.	
§ 63.5(c)	No	Reserved.
§ 63.5(d)	Yes.	
§ 63.5(e)	Yes.	
§ 63.5(f)	Yes.	
§ 63.6(a)	Yes	Applies only when capture and control system is used to comply with the standard.
§ 63.6(b)(1)–(5)	No	§ 63.3330 specifies compliance dates.
§ 63.6(b)(6)	No	Reserved.
§ 63.6(b)(7)	Yes.	
§ 63.6(c)(1)–(2)	Yes.	
§ 63.6(c)(3)–(4)	No	Reserved.
§ 63.6(c)(5)	Yes.	
§ 63.6(d)	No	Reserved.
§ 63.6(e)(1)(i)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019, see § 63.3340(a) for general duty requirement. Yes, for all other affected sources before July 9, 2021, and No thereafter, see § 63.3340(a) for general duty requirement.
§ 63.6(e)(1)(ii)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter.
§ 63.6(e)(1)(iii)	Yes.	
§ 63.6(e)(2)	No	Reserved.
§ 63.6(e)(3)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter.
§ 63.6(f)(1)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter.
§ 63.6(f)(2)–(3)	Yes.	
§ 63.6(g)	Yes.	
§ 63.6(h)	No	Subpart JJJJ does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(14)	Yes.	
§ 63.6(i)(15)	No	Reserved.
§ 63.6(i)(16)	Yes.	
§ 63.6(j)	Yes.	
§ 63.7(a)–(d)	Yes.	
§ 63.7(e)(1)	No	See § 63.3360(e)(2).

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General provisions reference	Applicable to subpart JJJJ	Explanation
§ 63.7(e)(2)–(3)	Yes.	
§ 63.7(f)–(h)	Yes.	
§ 63.8(a)(1)–(2)	Yes.	
§ 63.8(a)(3)	No	Reserved.
§ 63.8(a)(4)	No	Subpart JJJJ does not have monitoring requirements for flares.
§ 63.8(b)	Yes.	
§ 63.8(c)(1) and § 63.8(c)(1)(i)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019, see § 63.3340(a) for general duty requirement. Yes, for all other affected sources before July 9, 2021, and No thereafter, see § 63.3340(a) for general duty requirement.
§ 63.8(c)(1)(ii)	Yes	§ 63.8(c)(1)(ii) only applies if you use capture and control systems.
§ 63.8(c)(1)(iii)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter.
§ 63.8(c)(2)–(3)	Yes	See § 63.3350(e)(10)(iv) for temperature sensor validation procedures
§ 63.8(c)(4)	No	§ 63.3350 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	No	Subpart JJJJ does not require COMS.
§ 63.8(c)(6)–(8)	Yes	Provisions for COMS are not applicable.
§ 63.8(d)(1)–(2)	Yes	Refer to § 63.3350(e)(5) for CPMS quality control procedures to be included in the quality control program.
§ 63.8(d)(3)	No	§ 63.3350(e)(5) specifies the program of corrective action.
§ 63.8(e)–(f)	Yes	§ 63.8(e)(2) does not apply to CPMS. § 63.8(f)(6) only applies if you use CEMS.
§ 63.8(g)	Yes	Only applies if you use CEMS.
§ 63.9(a)	Yes.	
§ 63.9(b)(1)	Yes.	
§ 63.9(b)(2)	Yes	Except § 63.3400(b)(1) requires submittal of initial notification for existing affected sources no later than 1 year before compliance date.
§ 63.9(b)(3)–(5)	Yes.	
§ 63.9(c)–(e)	Yes.	
§ 63.9(f)	No	Subpart JJJJ does not require opacity and visible emissions observations.
§ 63.9(g)	Yes	Provisions for COMS are not applicable.
§ 63.9(h)(1)–(3)	Yes.	
§ 63.9(h)(4)	No	Reserved.
§ 63.9(h)(5)–(6)	Yes.	
§ 63.9(i)	Yes.	
§ 63.9(j)	Yes.	
§ 63.9(k)	Yes	Only as specified in § 63.9(j).
§ 63.10(a)	Yes.	
§ 63.10(b)(1)	Yes.	
§ 63.10(b)(2)(i)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter.
§ 63.10(b)(2)(ii)	No	See § 63.3410 for recordkeeping of relevant information.
§ 63.10(b)(2)(iii)	Yes	§ 63.10(b)(2)(iii) only applies if you use a capture and control system.
§ 63.10(b)(2)(iv)–(v)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter.
§ 63.10(b)(2)(vi)–(xiv)	Yes.	
§ 63.10(b)(3)	Yes.	
§ 63.10(c)(1)	Yes.	
§ 63.10(c)(2)–(4)	No	Reserved.
§ 63.10(c)(5)–(8)	Yes.	
§ 63.10(c)(9)	No	Reserved.
§ 63.10(c)(10)–(14)	Yes.	
§ 63.10(c)(15)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter.
§ 63.10(d)(1)–(2)	Yes.	
§ 63.10(d)(3)	No	Subpart JJJJ does not require opacity and visible emissions observations.

General provisions reference	Applicable to subpart JJJJ	Explanation
§ 63.10(d)(4)	Yes.	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter. See § 63.3400(c) for malfunction reporting requirements.
§ 63.10(d)(5)(i)	Depends, see explanation	
§ 63.10(d)(5)(ii)	Depends, see explanation	No, for new or reconstructed sources which commenced construction or reconstruction after September 19, 2019. Yes, for all other affected sources before July 9, 2021, and No thereafter. See § 63.3400(c) for malfunction reporting requirements.
§ 63.10(e)(1)–(2)	Yes	Provisions for COMS are not applicable.
§ 63.10(e)(3)–(4)	No	Subpart JJJJ does not require opacity and visible emissions observations.
§ 63.10(f)	Yes.	Subpart JJJJ does not specify use of flares for compliance.
§ 63.11	No	
§ 63.12	Yes.	
§ 63.13	Yes.	
§ 63.14	Yes	Subpart JJJJ includes provisions for alternative ASME and ASTM test methods that are incorporated by reference.
§ 63.15	Yes.	
§ 63.16	Yes.	

[85 FR 41317, July 9, 2020, as amended at 85 FR 73905, Nov. 19, 2020]

Subpart KKKK—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans

SOURCE: 68 FR 64446, Nov. 13, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.3480 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for metal can surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.3481 Am I subject to this subpart?

(a) Except as provided in paragraph (c) of this section, the source category to which this subpart applies is surface coating of metal cans and ends (including decorative tins) and metal crowns and closures. It includes the subcategories listed in paragraphs (a)(1) through (4) of this section. Surface coating is the application of coatings to a substrate using, for example, spray guns or dip tanks.

(1) *One- and two-piece draw and iron can body coating.* The one- and two-piece draw and iron can body coating

subcategory includes all coating processes involved in the manufacture of can bodies by the draw and iron process. This subcategory includes three distinct coating type segments reflecting the coatings appropriate for cans with different end uses. Those are two-piece beverage can body coatings, two-piece food can body coatings, and one-piece aerosol can body coatings.

(2) *Sheetcoating.* The sheetcoating subcategory includes all of the flat metal sheetcoating operations associated with the manufacture of three-piece cans, decorative tins, crowns, and closures.

(3) *Three-piece can body assembly coating.* The three-piece can body assembly coating subcategory includes all of the coating processes involved in the assembly of three-piece metal can bodies. The subcategory includes five distinct coating type segments reflecting the coatings appropriate for cans with different end uses. Those are inside spray on food cans, aseptic side seam stripes on food cans, nonaseptic side seam stripes on food cans, side seam stripes on general line nonfood cans, and side seam stripes on aerosol nonfood cans.

(4) *End coating.* The end coating subcategory includes the application of end seal compounds and repair spray coatings to metal can ends. This subcategory includes three distinct coating type segments reflecting the end