oil and meal products, including specialty soybean products, in which oil is removed from listed oilseeds through direct contact with an organic solvent. Process equipment typically includes the following components: oilseed preparation operations (including conditioning, drying, dehulling, and cracking), solvent extractors, desolventizertoasters, meal dryers, meal coolers, meal conveyor systems, oil distillation units, solvent evaporators and condensers, solvent recovery system (also referred to as a mineral oil absorption system), vessels storing solvent-laden materials, and crude meal packaging and storage vessels. A vegetable oil production process does not include vegetable oil refining operations (including operations such as bleaching, hydrogenation, and deodorizing) and operations that engage in additional chemical treatment of crude soybean produced specialty meals in desolventizer units (including operations such as soybean isolate produc-

[66 FR 19011, Apr. 12, 2001, as amended at 71 FR 20464, Apr. 20, 2006; 85 FR 15635, Mar. 18, 2020]

### Subpart HHHH—National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

Source: 67 FR 17835, Apr. 11, 2002, unless otherwise noted.

WHAT THIS SUBPART COVERS

### §63.2980 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions from facilities that produce wet-formed fiberglass mat. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

### §63.2981 Does this subpart apply to me?

You must comply with this subpart if you meet the criteria in paragraphs (a) and (b) of this section:

#### 40 CFR Ch. I (7-1-21 Edition)

- (a) You own or operate a drying and curing oven at a wet-formed fiberglass mat production facility.
- (b) Your drying and curing oven or the facility at which your drying and curing oven is located is a major source of hazardous air pollutants (HAP). A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.07 megagrams (10 tons) or more per year of a single HAP or 22.68 megagrams (25 tons) or more per year of any combination of HAP.

### § 63.2982 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new, reconstructed, or existing affected source. The affected source (the portion of your plant covered by this subpart) is each wet-formed fiberglass mat drying and curing oven.
- (b) An affected source is a new affected source if you commenced construction of the affected source after May 26, 2000, and you meet the applicability criteria in §63.2981 at start-up.
- (c) An affected source is reconstructed if you meet the criteria as defined in §63.2.
- (d) An affected source is existing if it is not new or reconstructed.

#### **EMISSION LIMITATIONS**

### §63.2983 What emission limits must I meet?

- (a) You must limit the formaldehyde emissions from each drying and curing oven by either:
- (1) Limiting emissions of formaldehyde to 0.03 kilograms or less per megagram (0.05 pounds per ton) of fiberglass mat produced; or
- (2) Reducing uncontrolled formaldehyde emissions by 96 percent or more.
  - (b) [Reserved]

### §63.2984 What operating limits must I meet?

(a) You must maintain operating parameters within established limits or ranges specified in your operation, maintenance, and monitoring (OMM) plan described in §63.2987. If there is a

deviation of any of the specified parameters from the limit or range specified in the OMM plan, you must address the deviation according to paragraph (b) of this section. You must comply with the operating limits specified in paragraphs (a)(1) through (4) of this section:

- (1) You must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the temperature established during your performance test and specified in your OMM plan, except during periods when using a non-HAP binder.
- (2) You must not use a resin with a free-formaldehyde content greater than that of the resin used during your performance test and specified in your OMM plan.
- (3) You must operate the wet-formed fiberglass mat production process so that the average urea formaldehyde resin solids application rate in any 3-hour block period does not exceed the average application rate achieved during your performance test and specified in your OMM plan.
- (4) If you use an add-on control device other than a thermal oxidizer or wish to monitor an alternative parameter and comply with a different operating limit than the limit specified in paragraph (a)(1) of this section, you must obtain approval for the alternative monitoring under §63.8(f). You must include the approved alternative monitoring and operating limits in the OMM plan specified in §63.2987.
- (b) When during a period of normal operation, you detect that an operating parameter deviates from the limit or range established in paragraph (a) of this section, you must initiate corrective actions within 1 hour according to the provisions of your OMM plan. The corrective actions must be completed in an expeditious manner as specified in the OMM plan.
- (c) You must maintain and inspect control devices according to the procedures specified in the OMM plan.
- (d) You must include the operating limits specified in paragraphs (a)(1) through (4) of this section and their allowable ranges or levels in your OMM plan. Your 40 CFR part 70 operating permit for the drying and curing oven

must contain a requirement that you develop and operate according to an OMM plan at all times.

(e) If you use a thermal oxidizer or other control device to achieve the emission limits in \$63.2983, you must capture and convey the formaldehyde emissions from each drying and curing oven according to the procedures in Chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (23rd Edition) or the appropriate chapters of "Industrial Ventilation: A Manual of Recommended Practice for Design" (27th Edition) (both are incorporated by reference, see \$63.14). In addition, you may use an alternate as approved by the Administrator.

[67 FR 17835, Apr. 11, 2002, as amended at 71 FR 20464, Apr. 20, 2006; 84 FR 6692, Feb. 28, 2019]

### § 63.2985 When do I have to comply with these standards?

- (a) Existing drying and curing ovens must be in compliance with this subpart no later than April 11, 2005, except as otherwise specified in this section and §§ 63.2986, 63.2998, 63.3000, and 63.3004 and Table 2 to this subpart.
- (b) Drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must be in compliance with this subpart at startup or by April 11, 2002, whichever is later, except as otherwise specified in this section and §§63.2986, 63.2998, 63.3000, and 63.3004 and Table 2 to this subpart.
- (c) If your facility is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the following apply:
- (1) Any portion of the existing facility that is a new affected source or a new reconstructed affected source must be in compliance upon startup.
- (2) All other parts of the source must be in compliance with this subpart 1 year after becoming a major source or by April 11, 2005, whichever is later.
- (d) Drying and curing ovens constructed or reconstructed after April 6, 2018 must be in compliance with this subpart at startup or by February 28, 2019 whichever is later.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6692, Feb. 28, 2019]

### §63.2986 How do I comply with the standards?

- (a) You must install, maintain, and operate a thermal oxidizer or other control device or implement a process modification that reduces formaldehyde emissions from each drying and curing oven to the emission limits specified in §63.2983.
- (b) You must comply with the operating limits specified in §63.2984. The operating limits prescribe the requirements for demonstrating continuous compliance based on the OMM plan. You must begin complying with the operating limits on the date by which you must complete the initial performance test.
- (c) You must conduct a performance test according to §§63.2991, 63.2992, and 63.2993 to demonstrate compliance for each drying and curing oven subject to the emission limits in §63.2983, and to establish or modify the operating limits or ranges for process or control device parameters that will be monitored to demonstrate continuous compliance.
- (d) You must install, calibrate, maintain, and operate devices that monitor the parameters specified in your OMM plan at the frequency specified in the plan. All continuous parameter monitoring systems must be installed and operating no later than the applicable compliance date specified in §63.2985.
- (e) You must prepare and follow a written OMM plan as specified in \$63.2987
- (f) You must comply with the monitoring, recordkeeping, notification, and reporting requirements of this subpart as required by §§63.2996 through 63.3000.
- (g) You must comply with the requirements in paragraphs (g)(1) through (3) of this section.
- (1) Before August 28, 2019, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018 must be in compliance with the emission limits in \$63.2983 and the operating limits in \$63.2984 at all times, except during periods of startup, shutdown, or malfunction. After August 27, 2019, affected sources must be in compliance with the emission limits in \$63.2983 and the operating limits in \$63.2984 at all times, including periods

- of startup, shutdown, or malfunction. Affected sources that commence construction or reconstruction after April 6, 2018, must comply with all requirements of the subpart, no later than February 28, 2019 or upon startup, whichever is later.
- (2) Before August 28, 2019, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must always operate and maintain any affected source, including air pollution control equipment and monitoring equipment, according to the provisions in §63.6(e)(1). After August 27, 2019, for such affected sources, and after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, at all times, you must operate and maintain any 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 you to make any further efforts to reduce emissions if you are in compliance with the emissions limits required by this subpart. The Administrator will base the determination of whether a source is operating in compliance with operation and maintenance requirements on information available to the Administrator which may include, but is not limited to. monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- (3) Before August 28, 2019, for each existing source and for each new or reconstructed source for which construction commenced after May 26, 2000 and before April 9, 2018, you must maintain your written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan must address the startup, shutdown, and corrective actions taken for malfunctioning process and air pollution control equipment. A startup, shutdown, and malfunction plan is not required for such affected sources after August

27, 2019. No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

[67 FR 17835, Apr. 11, 2002, as amended at 71 FR 20464, Apr. 20, 2006; 84 FR 6693, Feb. 28, 2019]

### OPERATION, MAINTENANCE, AND MONITORING PLAN

## § 63.2987 What must my operation, maintenance, and monitoring (OMM) plan include?

- (a) You must prescribe the monitoring that will be performed to ensure compliance with these emission limitations. Table 1 to this subpart lists the minimum monitoring requirements. Your plan must specify the items listed in paragraphs (a)(1) through (3) of this section:
- (1) Each process and control device to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.
- (2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.
- (3) The operating limits or ranges for each parameter that represent continuous compliance with the emission limits in §63.2983. Operating limits and ranges must be based on values of the monitored parameters recorded during performance tests.
- (b) You must establish routine and long-term maintenance and inspection schedules for each control device. You must incorporate in the schedules the control device manufacturer's recommendations for maintenance and inspections or equivalent procedures. If you use a thermal oxidizer, the maintenance schedule must include procedures for annual or more frequent inspection of the thermal oxidizer to ensure that the structural and design integrity of the combustion chamber is maintained. At a minimum, you must meet the requirements of paragraphs (b)(1) through (10) of this section:
- (1) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.

- (2) Ensure proper adjustment of combustion air and adjust if necessary.
- (3) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.
- (4) Inspect dampers, fans, and blowers for proper operation.
- (5) Inspect motors for proper operation.
- (6) Inspect, when possible, combustion chamber refractory lining. Clean and repair or replace lining if necessary.
- (7) Inspect the thermal oxidizer shell for proper sealing, corrosion, and hot spots.
- (8) For the burn cycle that follows the inspection, document that the thermal oxidizer is operating properly and make any necessary adjustments.
- (9) Generally observe whether the equipment is maintained in good operating condition.
- (10) Complete all necessary repairs as soon as practicable.
- (c) You must establish procedures for responding to operating parameter deviations. At a minimum, the procedures must include the information in paragraphs (c)(1) through (3) of this section
- (1) Procedures for determining the cause of the operating parameter deviation.
- (2) Actions for correcting the deviation and returning the operating parameters to the allowable ranges or limits
- (3) Procedures for recording the date and time that the deviation began and ended, and the times corrective actions were initiated and completed.
- (d) Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits. Table 1 to this subpart establishes the minimum record-keeping requirements.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6693, Feb. 28, 2019]

### §63.2988 [Reserved]

### §63.2989 How do I change my OMM plan?

Changes to the operating limits or ranges in your OMM plan require a new performance test.

- (a) To revise the ranges or levels established for your operating limits in §63.2984, you must meet the requirements in paragraphs (a)(1) and (2) of this section:
- (1) Submit a notification of performance test to the Administrator as specified in §63.7(b) to revise your operating ranges or limits.
- (2) After completing the performance test to demonstrate that compliance with the emissions limits can be achieved at the revised levels of the operating limits, you must submit the performance test results and the revised operating limits as part of the notification of compliance status required under §63.9(h).
- (b) If you are revising the inspection and maintenance procedures in your plan that are specified in §63.2987(b), you do not need to conduct a new performance test.
- (c) If you plan to operate your process or control device under alternative operating conditions and do not wish to revise your OMM plan when you change operating conditions, you can perform a separate compliance test to establish operating limits for each condition. You can then include the operating limits for each condition in your OMM plan. After completing the performance tests, you must record the date and time when you change operations from one condition to another, the condition under which you are operating, and the operating limits that apply under that condition. If you can perform a single performance test that establishes the most stringent operating limits that cover all alternative operating conditions, then you do not need to comply with the provisions of this paragraph.

 $[67\ FR\ 17835,\ Apr.\ 11,\ 2002,\ as\ amended\ at\ 84\ FR\ 6693,\ Feb.\ 28,\ 2019]$ 

# § 63.2990 Can I conduct short-term experimental production runs that cause parameters to deviate from operating limits?

With the approval of the Administrator, you may conduct short-term experimental production runs during which your operating parameters deviate from the operating limits. Experimental runs may include, but are not limited to, runs using resin with a

higher free-formaldehyde content than specified in the OMM plan, or using experimental pollution prevention techniques. To conduct a short-term experimental production run, you must complete the requirements in paragraphs (a) and (b) of this section.

- (a) Prepare an application to the Administrator for approval to conduct the experimental production runs. Your application must include the items listed in paragraphs (a)(1) through (6) of this section.
- (1) The purpose of the experimental production run.
  - (2) Identification of the affected line.
- (3) An explanation of how the operating parameters will deviate from the previously approved ranges and limits.
- (4) The duration of the experimental production run.
- (5) The date and time of the experimental production run.
- (6) A description of any emission testing to be performed during the experimental production run.
- (b) Submit the application to the Administrator for approval at least 30 days before you conduct the experimental production run.
- (c) If you conduct such experimental production runs without first receiving approval from the Administrator, then you must conduct a performance test under those same experimental production run conditions to show that you were in compliance with the formaldehyde emission limits in §63.2983.

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

### § 63.2991 When must I conduct performance tests?

Except for drying and curing ovens subject to a federally enforceable permit that requires the exclusive use of non-HAP binders, you must conduct a performance test for each drying and curing oven subject to this subpart according to the provisions in paragraphs (a) through (c) of this section:

(a) Initially. You must conduct a performance test to demonstrate initial compliance and to establish operating parameter limits and ranges to be used to demonstrate continuous compliance with the emission standards no later than 180 days after the applicable compliance date specified in §63.2985.

- (b) Every 5 years. You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 operating permit.
- (c) To change your OMM plan. You must conduct a performance test according to the requirements specified in §63.2992 to change the limit or range for any operating limit specified in your OMM plan established during a previous compliance test.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6693, Feb. 28, 2019]

### § 63.2992 How do I conduct a performance test?

- (a) You must verify the performance of monitoring equipment as specified in §63.2994 before performing the test.
- (b) You must conduct the performance test according to the requirements in §63.7(a) through (d), (e)(2) through (4), and (f) through (h).
- (c) You must conduct the performance test under the conditions specified in paragraphs (c)(1) and (2) of this section.
- (1) The resin must have the highest specified free-formaldehyde content that will be used.
- (2) You must operate at the maximum feasible urea-formaldehyde resin solids application rate (pounds urea-formaldehyde resin solids applied per hour) that will be used.
- (d) During the performance test, you must monitor and record the operating parameters that you will use to demonstrate continuous compliance after the test. These parameters are listed in Table 1 to this subpart.
- (e) You must conduct performance tests under conditions that are representative of the performance of the affected source. 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 record an explanation to support that such conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(f) You must conduct three separate test runs for each performance test as specified in §63.7(e)(3), and each test run must last at least 1 hour.

 $[67\ {\rm FR}\ 17835,\ {\rm Apr.}\ 11,\ 2002,\ {\rm as}\ {\rm amended}\ {\rm at}\ 84\ {\rm FR}\ 6693,\ {\rm Feb}\ 28,\ 2019]$ 

### § 63.2993 What test methods must I use in conducting performance tests?

- (a) Use EPA Method 1 (40 CFR part 60, appendix A-1) for selecting the sampling port location and the number of sampling ports.
- (b) Use EPA Method 2 (40 CFR part 60, appendix A-1) for measuring the volumetric flow rate of the stack gas.
- (c) Use EPA Method 3 or 3A (40 CFR part 60, appendix A-2) for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis.
- (d) Use EPA Method 4 (40 CFR part 60, appendix A-3) for measuring the moisture content of the stack gas.
- (e) Use EPA Method 316, 318, or 320 (40 CFR part 63, appendix A) for measuring the concentration of formaldehyde.
- (f) Use the method contained in appendix A to this subpart or the resin purchase specification and the vendor specification sheet for each resin lot for determining the free-formaldehyde content in the urea-formaldehyde resin.
- (g) Use the method in appendix B to this subpart for determining product loss-on-ignition.

[84 FR 6694, Feb. 28, 2019]

### § 63.2994 How do I verify the performance of monitoring equipment?

- (a) Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) through (3) of this section:
- (1) Install and calibrate all process equipment, control devices, and monitoring equipment.
- (2) Develop and implement a continuous parameter monitoring system (CPMS) quality control program that includes written procedures for CPMS according to \$63.8(d)(1) and (2). You must 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

subpart, to be made available for inspection, upon request, by the Administrator. If you revise the performance evaluation plan, you must 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. You should include the program of corrective action in the plan required under §63.8(d)(2).

- (3) Conduct a performance evaluation of the CPMS according to \$63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.
- (b) If you use a thermal oxidizer, the temperature monitoring device must meet the performance and equipment specifications listed in paragraphs (b)(1) through (3) of this section:
- (1) The temperature monitoring device must be installed either at the exit of the combustion zone of each thermal oxidizer, or at the location specified by the manufacturer. The temperature monitoring device must also be installed in a location before any heat recovery or heat exchange equipment, and it must remain in the same location for both the performance test and the continuous monitoring of temperature.
- (2) The recorder response range must include zero and 1.5 times the average temperature required in §63.2984(a)(1).
- (3) The measurement method or reference method for calibration must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference subject to the approval of the Administrator.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6694, Feb. 28, 2019]

### § 63.2995 What equations must I use to determine compliance?

(a) Percent reduction for formaldehyde. To determine compliance with the percent reduction formaldehyde emission standard, use equation 1 of this section as follows:

$$E_{\rm f} = \frac{M_{\rm i} - M_{\rm o}}{M_{\rm i}} \times 100 \qquad \text{(Eq. 1)}$$

Where:

- $\mathbf{E}_{\mathrm{f}} = \mathbf{Formaldehyde}$  control efficiency, percent.
- $M_i = Mass$  flow rate of formaldehyde entering the control device, kilograms (pounds) per hour.
- $M_{\rm o}$  = Mass flow rate of formaldehyde exiting the control device, kilograms (pounds) per hour.
- (b) Formaldehyde mass emissions rate. To determine compliance with the kilogram per megagram (pound per ton) formaldehyde emission standard, use equation 2 of this section as follows:

$$E = \frac{M}{P}$$
 (Eq. 2)

Where

- E = Formaldehyde mass emissions rate, kilograms (pounds) of formaldehyde per megagram (ton) of fiberglass mat produced.
- M = Formaldehyde mass emissions rate, kilograms (pounds) per hour.
- P = The wet-formed fiberglass mat production rate during the emissions sampling period, including any material trimmed from the final product, megagrams (tons) per hour.
- (c) Urea-formaldehyde (UF) resin solids application rate. To determine the UF resin solids application rate, use equation 3 of this section as follows:

$$\frac{\text{UF Solids}}{\text{Hour}} = \text{LOI} \times \text{UFL} \times \text{MW} \times \text{SQ} \qquad \text{(Eq. 3)}$$

Where:

UF solids/hour = UF resin solids application rate (pounds per hour).

LOI = loss on ignition (weight faction), or pound of organic binder per pound of mat.

UFL = UF-to-latex ratio in the binder (mass fraction of UF resin solids in total combined resin solids for UF and latex), or pound of UF solids per pound of total resin solids (UF and latex).

MW = weight of the final mat per square (pounds per roofing square).

SQ = roofing squares produced per hour.

MONITORING REQUIREMENTS

### §63.2996 What must I monitor?

(a) You must monitor the parameters listed in Table 1 to this subpart and any other parameters specified in your OMM plan. You must monitor the parameters, at a minimum, at the corresponding frequencies listed in Table 1 to this subpart, except as specified in paragraph (b) of this section.

(b) During periods when using a non-HAP binder, you are not required to monitor the parameters in Table 1 to this subpart.

[84 FR 6694, Feb. 28, 2019]

### § 63.2997 What are the requirements for monitoring devices?

(a) If you control formaldehyde emissions using a thermal oxidizer, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Install, calibrate, maintain, and operate a device to monitor and record continuously the thermal oxidizer temperature at the exit of the combustion zone before any substantial heat exchange occurs or at the location consistent with the manufacturer's recommendations.

(2) Continuously monitor the thermal oxidizer temperature and determine and record the average temperature in 15-minute and 3-hour block averages. You may determine the average temperature more frequently than every 15 minutes and every 3 hours, but not less frequently.

(b) If you use process modifications or a control device other than a thermal oxidizer to control formaldehyde emissions, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6694, Feb. 28, 2019]

NOTIFICATIONS, REPORTS, AND RECORDS

### §63.2998 What records must I maintain?

You must maintain records according to the procedures of §63.10. You must maintain the records listed in paragraphs (a) through (i) of this section.

- (a) All records required by §63.10, where applicable. Table 2 of this subpart presents the applicable requirements of the general provisions.
  - (b) The OMM plan.
- (c) During periods when the binder formulation being applied contains HAP, records of values of monitored parameters listed in Table 1 to this subpart to show continuous compliance with each operating limit specified in Table 1 to this subpart. If you do not monitor the parameters in Table 1 to this subpart during periods when using non-HAP binder, you must record the dates and times that production of mat using non-HAP binder began and ended.
- (d) Records of maintenance and inspections performed on the control devices.
- (e) Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if an operating parameter deviation occurs, you must record:
- (1) The date, time, and duration of the operating parameter deviation;
- (2) A brief description of the cause of the operating parameter deviation;
- (3) The dates and times at which corrective actions were initiated and completed;
- (4) A brief description of the corrective actions taken to return the parameter to the limit or to within the range specified in the OMM plan; and
- (5) A record of whether the deviation occurred during a period of startup, shutdown, or malfunction.
- (f) Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, keep all records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. Records specified in §63.6(e)(3)(iii) through (v) are not required to be kept after August 27, 2019 for existing or new drying and curing ovens.

- (g) After February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, in the event that an affected source fails to meet an applicable standard, including deviations from an emission limit in §63.2983 or an operating limit in §63.2984, you must record the number of failures and, for each failure, you must:
- (1) Record the date, time, and duration of the failure:
  - (2) Describe the cause of the failure:
- (3) Record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions; and
- (4) Record actions taken to minimize emissions in accordance with §63.2986(g)(2) and any corrective actions taken to return the affected unit to its normal or usual manner of operation and/or to return the operating parameter to the limit or to within the range specified in the OMM plan, and the dates and times at which corrective actions were initiated and completed.
- (h) If you operate your process or control device under alternative operating condition and have established operating limits for each condition as specified in §63.2989(c), then you must keep records of the date and time you changed operations from one condition to another, the condition under which you are operating, and the applicable operating limits for that condition.
- (i) Records showing how the maximum residence time was derived.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6694, Feb. 28, 2019]

### §63.2999 In what form and for how long must I maintain records?

- (a) You must maintain each record required by this subpart for 5 years. You must maintain the most recent 2 years of records at the facility. The remaining 3 years of records may be retained offsite.
- (b) Your records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative medium, such as microfilm, computer, computer disks, compact

disk, digital versatile disk, flash drive, other commonly used electronic storage medium, magnetic tape, or on microfiche.

(c) You may maintain any records that you submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) 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 delegated air agency or the EPA as part of an onsite compliance evaluation.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6695, Feb. 28, 2019]

### § 63.3000 What notifications and reports must I submit?

- (a) You must submit all notifications and reports required by the applicable general provisions and this section. Table 2 of this subpart presents the applicable requirements of the general provisions.
- (b) Notification of compliance status. You must submit the notification of compliance status, including the performance test results, the operating limits or ranges as determined during the performance test, and other information specified in §63.9(h), before the close of business on the 60th calendar day after you complete the performance test according to §63.10(d)(2).
- (c) Semiannual compliance reports. You must submit semiannual compliance reports according to the requirements of paragraphs (c)(1) through (6) of this section.
- (1) Dates for submitting reports. Unless the Administrator has agreed to a different schedule for submitting reports under §63.10(a), you must deliver or postmark each semiannual compliance report no later than 30 days following the end of each semiannual reporting period. The first semiannual reporting period begins on the compliance date for your affected source and ends on June 30 or December 31, whichever date immediately follows your compliance date. Each subsequent semiannual reporting period for which you must submit a semiannual compliance report begins on July 1 or January 1 and ends 6 calendar months later. Before March 1, 2019, as required by §63.10(e)(3), you

must begin submitting quarterly compliance reports if you deviate from the emission limits in §63.2983 or the operating limits in §63.2984. After February 28, 2019, you are not required to submit quarterly compliance reports. If you deviate from the emission limits in §63.2983 or the operating limits in §63.2984 in the quarter prior to February 28, 2019, you must include this information in the report for the first full semiannual reporting period following February 28, 2019.

- (2) Inclusion with title V report. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and for which the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 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 paragraph (c)(1) of this section.
- (3) Contents of reports. The semi-annual compliance report must contain the information in paragraphs (c)(3)(i) through (vi) of this section:
  - (i) Company name and address.
- (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (iii) Date of report and beginning and ending dates of the reporting period.
- (iv) A summary of the total duration of continuous parameter monitoring system downtime during the semi-annual reporting period and the total duration of continuous parameter monitoring system downtime as a percent of the total source operating time during that semiannual reporting period.
- (v) The date of the latest continuous parameter monitoring system certification or audit.
- (vi) A description of any changes in the wet-formed fiberglass mat manufacturing process, continuous parameter monitoring system, or add-on control device since the last semiannual reporting period.
- (4) No deviations. If there were no instances where an affected source failed to meet an applicable standard, includ-

ing no deviations from the emission limit in §63.2983 or the operating limits in §63.2984, the semiannual compliance report must include a statement to that effect. If there were no periods during which the continuous parameter monitoring systems were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement to that effect.

- (5) Deviations. Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if there was a deviation from the emission limit in §63.2983 or an operating limit in §63.2984, the semiannual compliance report must contain the information in paragraphs (c)(5)(i) through (ix) of this section:
- (i) The date and time that each malfunction started and stopped.
- (ii) The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.
- (iii) The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in §63.8(c)(8).
- (iv) 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.
- (v) The date and time that corrective actions were taken, a description of the cause of the deviation, and a description of the corrective actions taken.
- (vi) A summary of the total duration of each deviation during the semi-annual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.
- (vii) A breakdown of the total duration of the deviations during the semi-annual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- (viii) A brief description of the associated process units.
- (ix) A brief description of the associated continuous parameter monitoring system.

- (6) Deviations. For affected sources that commence construction or reconstruction after April 6, 2018, after February 28, 2019, and after August 27, 2019 for all other affected sources, if there was an instance where an affected source failed to meet an applicable standard, including a deviation from the emission limit in §63.2983 or an operating limit in §63.2984, the semi-annual compliance report must record the number of failures and contain the information in paragraphs (c)(6)(i) through (ix) of this section:
- (i) The date, time, and duration of each failure.
- (ii) The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.
- (iii) The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in §63.8(c)(8).
- (iv) A list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.
- (v) The date and time that corrective actions were taken, a description of the cause of the failure (including unknown cause, if applicable), and a description of the corrective actions taken.
- (vi) A summary of the total duration of each failure during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.
- (vii) A breakdown of the total duration of the failures during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.
- (viii) A brief description of the associated process units.
- (ix) A brief description of the associated continuous parameter monitoring system.
- (d) Startup, shutdown, malfunction reports. Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if you have a startup,

- shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified §63.10(d)(5). No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.
- (e) Performance test results. You must submit results of each performance test (as defined in §63.2) required by this subpart no later than 60 days after completing the test as specified in §63.10(d)(2). You must include the values measured during the performance test for the parameters listed in Table 1 of this subpart and the operating limits or ranges that you will include in your OMM plan. For the thermal oxidizer temperature, you must include 15-minute averages and the average for the three 1-hour test runs. For affected sources that commence construction or reconstruction after April 6, 2018, beginning February 28, 2019, and beginning no later than August 27, 2019 for all other affected sources, you must submit the results following the procedures specified in paragraphs (e)(1) through (3) of this section.
- (1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https:// www.epa.gov/electronicreporting-airemissions /electronic-reporting-tool- ert) at the time of the test, you must submit the results of the performance test to the EPA via CEDRI (CEDRI can be accessed through the EPA's Central Da.ta. Exchange (CDX) (https:// cdx.epa.gov/)). You must submit performance test data in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
- (2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13, unless the Administrator agrees to or specifies an alternate reporting method.

- (3) If you claim that some of the performance test information you are submitting under paragraph (e)(1) is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disk, flash drive or other commonly used electronic storage medium to the EPA. You must clearly mark the electronic medium as CBI and mail to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, Mail Drop C404-02, 4930 Old Page Rd., Durham, NC 27703. You must submit the same ERT or alternate file with the CBI omitted to the EPA via the EPA's CDX as described in paragraph (e)(1) of this section.
- (f) Claims of EPA system outage. If you are required to electronically submit a report through the CEDRI in the EPA's CDX, you may assert a claim of EPA 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 (f)(1) through (7) of this section
- (1) You must have been or will be precluded from accessing CEDRI and submitting a required test report within the time prescribed due to an outage of either the EPA's CEDRI or CDX Systems.
- (2) The outage must have occurred within the period of time beginning five 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.
- (g) Claims of force majeure. If you are required to electronically submit a report through CEDRI in the 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 (g)(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 requirements 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 bevond 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

- (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.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6695, Feb. 28, 2019]

OTHER REQUIREMENTS AND INFORMATION

### §63.3001 What sections of the general provisions apply to me?

You must comply with the requirements of the general provisions of 40 CFR part 63, subpart A, as specified in Table 2 of this subpart.

[84 FR 6696, Feb. 28, 2019]

### §63.3002 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority, such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency is the primary enforcement authority. If the Administrator has not delegated authority to your State, only EPA enforces this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.
- (1) The authority under §63.6(g) to approve alternatives to the emission

limits in §63.2983 and operating limits in §63.2984 is not delegated.

- (2) The authority under  $\S63.7(e)(2)(ii)$  and (f) to approve of major alternatives (as defined in  $\S63.90$ ) to the test methods in  $\S63.2993$  is not delegated.
- (3) The authority under §63.8(f) to approve major alternatives (as defined in §63.90) to the monitoring requirements in §63.2996 and 63.2997 is not delegated.
- (4) The authority under §63.10(f) to approve major alternatives (as defined in §63.90) to recordkeeping, notification, and reporting requirements in §63.2998 through 63.3000 is not delegated.

#### § 63.3003 [Reserved]

### § 63.3004 What definitions apply to this subpart?

Terms used in this subpart are defined the Clean Air Act, in §63.2, and in this section as follows:

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Deviation means:

- (1) Before August 28, 2019, any instance in which an affected source subject to this subpart, or an owner or operator of such a source:
- (i) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard;
- (ii) 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
- (iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.
- (2) After February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, any instance in which an affected source subject to this

subpart, or an owner or operator of such a source:

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

Drying and curing oven means the process section that evaporates excess moisture from a fiberglass mat and cures the resin that binds the fibers.

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

Fiberglass mat production rate means the weight of finished fiberglass mat produced per hour of production including any trim removed after the binder is applied and before final packaging.

Loss-on-ignition means the percentage decrease in weight of fiberglass mat measured before and after it has been ignited to burn off the applied binder. The loss-on-ignition is used to monitor the weight percent of binder in fiberglass mat.

Maximum residence time means the longest time, during normal operation and excluding periods of ramping up to speed during startup, that a particular point on the fiberglass mat remains in the drying and curing oven. It is determined for each line by the equation:

T = L/S

Where:

T is the residence time, in seconds;

L is the length of the drying and curing oven, in feet; and

S is the slowest line speed normally operated on the line, excluding periods of ramping up to speed during startup, in feet per second.

Non-HAP binder means a binder formulation that does not contain any substance that is required to be listed in Section 3 of a safety data sheet (SDS) pursuant to 29 CFR 1910.1200(g) and that is a HAP as defined in section 112(b) of the Clean Air Act. In designating a non-HAP binder under this subpart, you may not rely on the SDS for a binder where the manufacturer has withheld the specific chemical

identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. You may not withhold this information when making the case that the binder is a non-HAP binder for the purposes of §63.2996.

Nonwoven wet-formed fiberglass mat manufacturing means the production of a fiberglass mat by bonding glass fibers to each other using a resin solution. Nonwoven wet-formed fiberglass mat manufacturing is also referred to as wet-formed fiberglass mat manufacturing.

Roofing square means the amount of finished product needed to cover an area 10 feet by 10 feet (100 square feet) of finished roof.

Shutdown after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, means the cessation of operation of the drying and curing of any binder-infused fiberglass mat for any purpose. Shutdown ends when the maximum residence time has elapsed after binder-infused fiberglass mat ceases to enter the drying and curing oven.

Startup after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, means the setting in operation of the drying and curing of binder-infused fiberglass mat for any purpose. Startup begins when binder-infused fiberglass mat enters the oven to be dried and cured for the first time or after a shutdown event.

Thermal oxidizer means an air pollution control device that uses controlled flame combustion inside a combustion chamber to convert combustible materials to noncombustible gases.

Urea-formaldehyde content in binder formulation means the mass-based percent of urea-formaldehyde resin in the total binder mix as it is applied to the glass fibers to form the mat.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6696, Feb. 28, 2019]

§§ 63.3005-63.3079 [Reserved]

### Pt. 63, Subpt. HHHH, Table 1

#### TABLE 1 TO SUBPART HHHH OF PART 63—MINIMUM REQUIREMENTS FOR MONITORING AND RECORDKEEPING

As stated in §63.2998(c), you must comply with the minimum requirements for monitoring and recordkeeping in the following table:

You must monitor these parameters:	At this frequency:	And record for the monitored parameter:
Thermal oxidizer temperature <sup>14</sup> Other process or control device parameters specified in your OMM plan <sup>24</sup> .	Continuously	15-minute and 3-hour block averages. As specified in your OMM plan.
3. Urea-formaldehyde resin solids application rate 4.	On each operating day, calculate the average lb/h application rate for each product manufactured during that day.	The average lb/h value for each product manufactured during the day.
4. Resin free-formaldehyde content <sup>4</sup>	For each lot of resin purchased	The value for each lot used during the operating day.
5. Loss-on-ignition <sup>3 4</sup>	Measured at least once per day, for each product manufactured during that day.	The value for each product manufactured during the operating day.
6. UF-to-latex ratio in the binder <sup>34</sup>	For each batch of binder prepared the operating day.	The value for each batch of binder pre- pared during the operating day.
7. Weight of the final mat product per square (lb/roofing square) 34.	Each product manufactured during the operating day.	The value for each product manufactured during the operating day.
<ol> <li>Average nonwoven wet-formed fiber- glass mat production rate (roofing square/h) 34.</li> </ol>	For each product manufactured during the operating day.	The average value for each product manufactured during operating day.

[84 FR 6697, Feb. 28, 2019]

### Table 2 to Subpart HHHH of Part 63—Applicability of General Provisions (40 $\,$ CFR PART 63, SUBPART A) TO SUBPART HHHH

As stated in §63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.1(a)(1)–(4)	General Applicability	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)	Initial Applicability Determination.	Yes.	
§ 63.1(c)(1)	Applicability After Standard Established.	Yes.	
§ 63.1(c)(2)		Yes	Some plants may be area sources.
§ 63.1(c)(3)		No	[Reserved].
§ 63.1(c)(4)–(5)		Yes.	
§ 63.1(c)(6)	Reclassification	Yes.	
§ 63.1(d)		No	[Reserved].
§ 63.1(e)	Applicability of Permit Program	Yes.	
§ 63.2	Definitions	Yes	Additional definitions in §63.3004.
§ 63.3	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(3)	Prohibited Activities	Yes.	
§ 63.4(a)(4)		No	[Reserved].
§ 63.4(a)(5)		Yes.	
§ 63.4(b)–(c)	Circumvention/Severability	Yes.	
§ 63.5(a)	Construction/Reconstruction	Yes.	
§ 63.5(b)(1)	Existing/Constructed/Reconstruction.	Yes.	
§ 63.5(b)(2)		No	[Reserved].
§ 63.5(b)(3)–(6)		Yes.	<del>-</del>
§ 63.5(c)		No	[Reserved].
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes.	,
§ 63.5(e)	Approval of Construction/Reconstruction.	Yes.	

<sup>1</sup> Required if a thermal oxidizer is used to control formaldehyde emissions.
2 Required if process modifications or a control device other than a thermal oxidizer is used to control formaldehyde emissions.
3 These parameters must be monitored and values recorded, but no operating limits apply.
4 You are not required to monitor or record these parameters during periods when using a non-HAP binder. If you do not monitor these parameters during periods when using a non-HAP binder, you must record the dates and times that production of mat using the non-HAP binder began and ended.

### Pt. 63, Subpt. HHHH, Table 2

### **Environmental Protection Agency**

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.5(f)	Approval of Construction/Reconstruction Based on State Review.	Yes.	
§ 63.6(a)	Compliance with Standards and Maintenance—Applicability.	Yes.	
§ 63.6(b)(1)–(5)	New and Reconstructed Sources-Dates.	Yes.	
§ 63.6(b)(6)		No	[Reserved].
§ 63.6(b)(7) § 63.6(c)(1)–(2)	Existing Sources Dates	Yes.	§ 63.2985 specifies dates.
§ 63.6(c)(3)–(4)		No	[Reserved].
§ 63.6(c)(5)		Yes.	
§ 63.6(d)	General Duty to Minimize Emis-	No No, for new or recon-	[Reserved].   See §63.2986(g) for general duty re-
§ 63.6(e)(1)(i)	sions.	structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	quirement.
§ 63.6(e)(1)(ii)	Requirement to Correct Mal- functions As Soon As Pos- sible.	No, for new or recon- structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	
§ 63.6(e)(1)(iii)	Operation and Maintenance Requirements.	Yes	§§ 63.2984 and 63.2987 specify additional requirements.
§ 63.6(e)(2)		No	[Reserved].
§ 63.6(e)(3)	SSM Plan Requirements	No, for new or recon- structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	
§ 63.6(f)(1)	SSM Exemption	No, for new or recon- structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	
§63.6(f)(2) and (3)	Compliance with Non-Opacity Emission Standards.	Yes.	
§ 63.6(g)	Alternative Non–Opacity Emission Standard.	Yes	EPA retains approval authority.
§ 63.6(h)	Compliance with Opacity/Visible Emissions Standards.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.6(i)(1)–(14)	Extension of Compliance	Yes.	[ [ ]
§ 63.6(i)(15) § 63.6(i)(16)		No   Yes.	[Reserved].
§ 63.6(j)	Exemption from Compliance	Yes.	
§ 63.7(a)	Performance Test Requirements—Applicability and Dates.	Yes.	
§ 63.7(b)	Notification of Performance Test.	Yes.	
§ 63.7(c)	Quality Assurance Program/ Test Plan.	Yes.	
§ 63.7(d)	Testing Facilities	Yes.	

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### Pt. 63, Subpt. HHHH, Table 2

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.7(e)(1)	Performance Testing	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See § 63.2992(c).
§ 63.7(e)(2)–(4)	Conduct of Tests	Yes	§§ 63.2991–63.2994 specify additional requirements.
§ 63.7(f) § 63.7(g)	Alternative Test Method	Yes	EPA retains approval authority
§ 63.7(h) § 63.8(a)(1)–(2)	Waiver of Tests Monitoring Requirements—Applicability.	Yes. Yes.	
§ 63.8(a)(3) § 63.8(a)(4) § 63.8(b) § 63.8(c)(1)(i)	Conduct of Monitoring	No	[Reserved].
§ 63.8(c)(1)(ii)	Continuous Monitoring System (CMS) Operation and Maintenance.	Yes.	
§ 63.8(c)(1)(iii)	Requirement to Develop SSM Plan for CMS.	No, for new or recon- structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	
§ 63.8(c)(2)–(4) § 63.8(c)(5)	Continuous Opacity Monitoring System (COMS) Procedures.	Yes. No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.8(c)(6)–(8) § 63.8(d)(1) and (2) § 63.8(d)(3)	Quality Control	Yes. Yes. No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See § 63.2994(a).
§ 63.8(e) § 63.8(f)(1)–(5) § 63.8(f)(6)	CMS Performance Evaluation Alternative Monitoring Method Alternative to Relative Accuracy Test.	Yes No	EPA retains approval authority. Subpart HHHHH does not require the use of continuous emissions monitoring systems (CEMS).
§ 63.8(g)(1) § 63.8(g)(2)	Data Reduction	Yes. No	Subpart HHHH does not require the use of CEMS or COMS.
§ 63.8(g)(3)–(5) § 63.9(a)	Data Reduction	Yes. Yes.	account of control.
§ 63.9(b) § 63.9(c)	Initial Notifications	Yes. Yes.	
§ 63.9(d)	sion.  New Source Notification for Special Compliance Require-	Yes.	
§ 63.9(e)	ments. Notification of Performance Test.	Yes.	

### Pt. 63, Subpt. HHHH, Table 2

### **Environmental Protection Agency**

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.9(g)(1) § 63.9(g)(2)–(3)	Additional CMS Notifications	Yes. No	Subpart HHHH does not require the
§ 63.9(h)(1)–(3)	Notification of Compliance Status.	Yes	use of COMS or CEMS. §63.3000(b) specifies additional requirements.
§ 63.9(h)(4) § 63.9(h)(5)–(6)		No Yes.	[Reserved].
§ 63.9(i) § 63.9(j)	Adjustment of Deadlines Change in Previous Information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in § 63.9(j).
§ 63.10(a)	Recordkeeping/Reporting—Applicability.	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements.	Yes	§ 63.2998 includes additional requirements.
§ 63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	No, for new or recon- structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet a Standard.	No, for new or recon- structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	See §63.2998(g) for recordkeeping requirements for an affected source that fails to meet an applicable standard.
§ 63.10(b)(2)(iii) § 63.10(b)(2)(iv) and (v)	Maintenance Records	Yes. No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Mal- functions.	Yes.	
§ 63.10(b)(2)(vii)–(xiv) § 63.10(b)(3)	Other CMS Requirements Recordkeeping requirement for	Yes. Yes.	
§ 63.10(c)(1)	applicability determinations.  Additional CMS Recordkeeping	Yes.	
§ 63.10(c)(2)–(4)		No	[Reserved].
§ 63.10(c)(5)–(8) § 63.10(c)(9)		Yes. No	[Reserved].
§ 63.10(c)(10)–(14)		Yes.	[Neserved].
§ 63.10(c)(15)	Use of SSM Plan	No, for new or recon- structed sources which commenced construc- tion or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No there- after.	
§ 63.10(d)(1)	General Reporting Requirements.	Yes	§ 63.3000 includes additional requirements.
§ 63.10(d)(2)	Performance Test Results	Yes	§ 63.3000 includes additional requirements.
§ 63.10(d)(3)	Opacity or Visible Emissions Observations.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.10(d)(4)	Progress Reports Under Extension of Compliance.	Yes.	

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Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.10(d)(5)	SSM Reports	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter.	See §63.3000(c) for malfunction reporting requirements.
§ 63.10(e)(1)	Additional CMS Reports—General.	No	Subpart HHHH does not require CEMS.
§ 63.10(e)(2)	Reporting results of CMS per- formance evaluations	Yes.	
§ 63.10(e)(3)	Excess Emission/CMS Performance Reports	Yes.	
§ 63.10(e)(4)	COMS Data Reports	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.10(f)	Recordkeeping/Reporting Waiver.	Yes	EPA retains approval authority.
§ 63.11	Control Device Requirements— Applicability	No	Facilities subject to subpart HHHH do not use flares as control devices.
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13 § 63.14	Addresses	Yes. Yes	See § 63.14(b)(2) and (3) for applicability requirements.
§ 63.15	Availability of Information/Confidentiality.	Yes.	

[84 FR 6697, Feb. 28, 2019, as amended at 85 FR 73904, Nov. 19, 2020]

APPENDIX A TO SUBPART HHHH OF PART 63—METHOD FOR DETERMINING FREE-FORMALDEHYDE IN UREA-FORMALDEHYDE RESINS BY SODIUM SULFITE (ICED & COOLED)

### 1.0 Scope

This procedure corresponds to the Housing and Urban Development method of determining free-formaldehyde in urea-formaldehyde resins. This method applies to samples that decompose to yield formaldehyde under the conditions of other free-formaldehyde methods. The primary use is for urea-formaldehyde resins.

#### 2.0 Part A—Testing Resins

Formaldehyde will react with sodium sulfite to form the sulfite addition products and liberate sodium hydroxide (NaOH); however, at room temperature, the methanol groups present will also react to liberate NaOH. Titrate at 0 degrees Celsius (°C) to minimize the reaction of the methanol groups.

- $2.1 \quad Apparatus \ Required.$
- 2.1.1 Ice crusher.
- 2.1.2 One 100-milliliter (mL) graduated cylinder.
  - 2.1.3 Three 400-mL beakers.
  - 2.1.4 One 50-mL burette.
- 2.1.5 Analytical balance accurate to  $0.1\,$  milligrams (mg).
  - 2.1.6 Magnetic stirrer.

- 2.1.7 Magnetic stirring bars.
- 2.1.8 Disposable pipettes.
- 2.1.9 Several 5-ounce (oz.) plastic cups.
- 2.1.10 Ice cube trays (small cubes).
- 2.2 Materials Required.
- $2.2.1\,$  Ice cubes (made with distilled water).  $2.2.2\,$  A solution of 1 molar (M) sodium sulfite (Na<sub>2</sub>SO<sub>3</sub>) (63 grams (g) Na<sub>2</sub>SO<sub>3</sub>/500 mL water (H<sub>2</sub>O) neutralized to thymolphthalein endpoint).
- 2.2.3 Standardized 0.1 normal (N) hydrochloric acid (HCl).
- 2.2.4 Thymolphthalein indicator (1.0 g thymolphthalein/199 g methanol).
- 2.2.5 Sodium chloride (NaCl) (reagent grade).
  - 2.2.6 Sodium hydroxide (NaOH).
  - 2.3 Procedure.
- 2.3.1 Prepare sufficient quantity of crushed ice for three determinations (two trays of cubes).
- 2.3.2 Put 70 cubic centimeters (cc) of 1 M Na<sub>2</sub>SO<sub>3</sub> solution into a 400-mL beaker. Begin stirring and add approximately 100 g of crushed ice and 2 g of NaCl. Maintain 0 °C during test, adding ice as necessary.
- 2.3.3 Add 10–15 drops of thymolphthalein indicator to the chilled solution. If the solution remains clear, add 0.1 N NaOH until the solution turns blue; then add 0.1 N HCl back to the colorless endpoint. If the solution turns blue upon adding the indicator, add 0.1 N HCl to the colorless endpoint.

2.3.4 On the analytical balance, accurately weigh the amount of resin indicated under the "Resin Sample Size" chart (see below) as follows.

#### RESIN SAMPLE SIZE

Approximate free HCHO (percent)	Sample weight (gram(s))
<0.5	10
0.5-1.0	5
1.0-3.0	2
3.0	1

2.3.4.1 Pour about 1 inch of resin into a 5 oz. plastic cup.

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2.3.4.2 Determine the gross weight of the cup, resin, and disposable pipette (with the narrow tip broken off) fitted with a small rubber bulb.

2.3.4.3 Pipette out the desired amount of resin into the stirring, chilled solution (approximately 1.5 to 2 g per pipette-full).

2.3.4.4 Quickly reweigh the cup, resin, and pipette with the bulb.

2.3.4.5 The resultant weight loss equals the grams of resin being tested.

2.3.5 Rapidly titrate the solution with 0.1 N HCl to the colorless endpoint described in Step 3 (2.3.3).

2.3.6 Repeat the test in triplicate.

2.4 Calculation.

2.4.1 The percent free-formaldehyde (%HCHO) is calculated as follows:

## $\%HCHO = \frac{\text{(mL 0.1 N HCl) (N of Acid) (3.003)}}{\text{Weight of Sample}}$

2.4.2 Compute the average percent freeformaldehyde of the three tests.

(NOTE: If the results of the three tests are not within a range of ±0.5 percent or if the average of the three tests does not meet expected limits, carry out Part B and then repeat Part A.)

#### 3.0 Part B—Standard Check

Part B ensures that test reagents used in determining percent free-formaldehyde in urea-formaldehyde resins are of proper concentration and that operator technique is correct. Should any doubts arise in either of these areas, the formaldehyde standard solution test should be carried out.

3.1 Preparation and Standardization of a 1 Percent Formalin Solution.

Prepare a solution containing approximately 1 percent formaldehyde from a stock 37 percent formalin solution. Standardize the prepared solution by titrating the hydroxyl ions resulting from the formation of the formaldehyde bisulfite complex.

3.2 Apparatus Required.

NOTE: All reagents must be American Chemical Society analytical reagent grade or better.

3.2.1 One 1-liter (L) volumetric flask (class A).

3.2.2 One 250-mL volumetric flask (class A).

3.2.3 One 250-mL beaker.

 $3.2.4 \quad One \ 100\text{-mL pipette (class A)}.$ 

3.2.5 One 10-mL pipette (class A).

3.2.6 One 50-mL graduated cylinder (class A).

3.2.7 A pH meter, standardized using pH 7 and pH 10 buffers.

3.2.8 Magnetic stirrer.

3.2.9 Magnetic stirring bars.

3.2.10 Several 5-oz. plastic cups.3.2.11 Disposal pipettes.

3.2.12 Ice cube trays (small cubes).

3.3 Materials Required.

3.3.1 A solution of 37 percent formalin.

3.3.2 Anhydrous Na<sub>2</sub>SO<sub>3</sub>. 3.3.3 Distilled water.

3.3.4 Standardized 0.100 N HCl.

3.3.5 Thymolphthalein indicator (1.0 g thymolphthalein/199 g methanol).

3.4 Preparation of Solutions and Reagents.

3.4.1 Formaldehyde Standard Solution (approximately 1 percent). Measure, using a graduated cylinder, 27.0 mL of analytical reagent 37 percent formalin solution into a 1-L volumetric flask. Fill the flask to volume with distilled water.

(NOTE: You must standardize this solution as described in section 3.5. This solution is stable for 3 months.)

3.4.2 Sodium Sulfite Solution 1.0 M (used for standardization of Formaldehyde Standard Solution). Quantitatively transfer, using distilled water as the transfer solvent, 31.50 g of anhydrous  $\rm Na_2SO_3$  into a 250-mL volumetric flask. Dissolve in approximately 100 mL of distilled water and fill to volume.

(NOTE: You must prepare this solution daily, but the calibration of the Formaldehyde Standard Solution needs to be done only once.)

3.4.3 Hydrochloric Acid Standard Solution 0.100 M. This reagent should be readily available as a primary standard that only needs to be diluted.

 $3.5 \ Standardization.$ 

3.5.1 Standardization of Formaldehyde Standard Solution.

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- 3.5.1.1 Pipette 100.0 mL of 1 M sodium sulfite into a stirred 250-mL beaker.
- 3.5.1.2 Using a standardized pH meter, measure and record the pH. The pH should be around 10. It is not essential the pH be 10; however, it is essential that the value be accurately recorded.
- 3.5.1.3 To the stirring  $Na_2SO_3$  solution, pipette in 10.0 mL of Formaldehyde Standard Solution. The pH should rise sharply to about 12.
- 3.5.1.4 Using the pH meter as a continuous monitor, titrate the solution back to the original exact pH using 0.100 N HCl. Record the milliliters of HCl used as titrant. (Note: Approximately 30 to 35 mL of HCl will be required.)
- 3.5.1.5 Calculate the concentration of the Formaldehyde Standard Solution using the equation as follows:

%HCHO = 
$$\frac{\text{(mL HCl) (N HCl) (3.003)}}{\text{mL sample}}$$

- 3.6 Procedure.
- 3.6.1 Prepare a sufficient quantity of crushed ice for three determinations (two trays of cubes).
- $3.6.2\,$  Put 70 cc of 1 M  $\rm Na_2SO_3$  solution into a 400-mL beaker. Begin stirring and add approximately 100 g of crushed ice and 2 g NaCl. Maintain 0 °C during the test, adding ice as necessary.

- 3.6.3 Add 10–15 drops of thymolphthalein indicator to the chilled solution. If the solution remains clear, add 0.1 N NaOH until the solution turns blue; then add 0.1 N HCl back to the colorless endpoint. If the solution turns blue upon adding the indicator, add 0.1 N HCl to the colorless endpoint.
- 3.6.4 On the analytical balance, accurately weigh a sample of Formaldehyde Standard Solution as follows.
- 3.6.4.1 Pour about 0.5 inches of Formaldehyde Standard Solution into a 5-oz. plastic cup.
- 3.6.4.2 Determine the gross weight of the cup. Formaldehyde Standard Solution, and a disposable pipette fitted with a small rubber bulb.
- 3.6.4.3 Pipette approximately 5 g of the Formaldehyde Standard Solution into the stirring, chilled  $Na_2SO_3$  solution.
- 3.6.4.4 Quickly reweigh the cup, Formaldehyde Standard Solution, and pipette with the bulb.
- 3.6.4.5 The resultant weight loss equals the grams of Formaldehyde Standard Solution being tested.
- 3.6.5 Rapidly titrate the solution with 0.1 N HCl to the colorless endpoint in Step 3 (3.6.3).
- 3.6.6 Repeat the test in triplicate.
- 3.7 Calculation for Formaldehyde Standard Solution.
- 3.7.1 The percent free-formaldehyde (% HCHO) is calculated as follows:

# $\%HCHO = \frac{(\text{mL } 0.1 \text{ N HCl})(\text{N Acid})(3.003)}{\text{Weight of Formaldehyde Standard Solution}}$

- 3.7.2 The range of the results of three tests should be no more than ±5 percent of the actual Formaldehyde Standard Solution concentration. Report results to two decimal places.
- 3.8 Reference.

West Coast Adhesive Manufacturers Trade Association Test 10.1.

APPENDIX B TO SUBPART HHHH OF PART 63—METHOD FOR THE DETERMINATION OF LOSS-ON-IGNITION

#### 1.0 Purpose

The purpose of this test is to determine the loss-on-ignition (LOI) of wet-formed fiber-glass mat.

### 2.0 Equipment

- 2.1~Scale sensitive to  $0.001~gram~(\rm g).$
- 2.2 Drying oven equipped with a means of constant temperature regulation and mechanical air convection.

- 2.3 Furnace designed to heat to at least 625 °C (1,157 °F) and controllable to  $\pm 25$  °C ( $\pm 45$  °F).
- 2.4 Crucible, high form, 250 milliliter (mL).
- 2.5 Desiccator.
- 2.6 Pan balance (see Note 2 in 4.9)
  - 3.0 Sample Collection Procedure
- 3.1 Obtain a sample of mat in accordance with Technical Association of the Pulp and Paper Industry (TAPPI) method 1007 "Sample Location."
- 3.2 Use a 5- to 10-g sample cut into pieces small enough to fit into the crucible.
- 3.3 Place the sample in the crucible. (NOTE 1: To test without the use of a crucible, see Note 2 after Section 4.8.)
- 3.4 Condition the sample in the furnace set at 105  $\pm 3$  °C (221  $\pm 9$  °F) for 5 minutes  $\pm 30$  seconds.

#### 4.0 Procedure

- 4.1 Condition each sample by drying for 5 minutes  $\pm 30$  seconds at 105  $\pm 3$  °C (22  $\pm 5$  °F).
- 4.2 Remove the test sample from the furnace and cool in the desiccator for 30 minutes in the standard atmosphere for testing glass textiles.
- 4.3 Place the empty crucible in the furnace at  $625 \pm 25$  °C (1,157  $\pm 45$  °F). After 30 minutes, remove and cool the crucible in the standard atmosphere (TAPPI method 1008) for 30 minutes.
- 4.4 Identify each crucible with respect to each test sample of mat.
- $4.5\,$  Weigh the empty crucible to the nearest 0.001 g. Record this weight as the tare mass, T.
- $4.6\,$  Place the test sample in the crucible and weigh to the nearest  $0.001\,$ g. Record this weight as the initial mass, A.
- 4.7 Place the test sample and crucible in the furnace and ignite at 625  $\pm25$  °C (1,157  $\pm45$  °F)
- 4.8 After ignition for at least 30 minutes, remove the test sample and crucible from the furnace and cool in the desiccator for 30 minutes in the standard atmosphere (TAPPI method 1008).
- 4.9 Remove each crucible, and test each sample separately from the desiccator, and immediately weigh each sample to the nearest 0.001 g. Record this weight as the ignited mass, B. (Note 2: When it is known that no ash residue separates from the test sample during the weighing and igniting processes, you may weigh the sample separately without the crucible. When this occurs, the tare mass (T) equals zero. With appropriate care, you can dry and weigh a single piece of mat and place with tongs into the ignition oven on appropriate refractory supports. When the ignition time is over, remove the sample as an intact fragile web and weigh it directly on a pan balance.)

### 5.0 Calculation

5.1 Calculate the LOI for each sample as follows:

$$\% LOI = 100 \times (A-B)/(A-T)$$

Where:

- A = initial mass of crucible and sample before ignition (g);
- B = mass of crucible and glass residue after ignition (g); and
- T = tare mass of crucible, (g) (see Note 2).
- 5.2 Report the percent LOI of the glass mat to the nearest 0.1 percent.

### $6.0 \quad Precision$

The repeatability of this test method for measurements on adjacent specimens from the same sample of mat is better than 1 percent.

### Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

SOURCE: 69 FR 22623, Apr. 26, 2004, unless otherwise noted.

WHAT THIS SUBPART COVERS

### § 63.3080 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for facilities which surface coat new automobile or new light-duty truck bodies or body parts for new automobiles or new lightduty trucks. This subpart also establishes NESHAP for facilities which surface coat new other motor vehicle bodies or body parts for new other motor vehicles which you choose to include in your affected source pursuant to §63.3082(c). This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

[71 FR 76926, Dec. 22, 2006]

#### § 63.3081 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 automobile and light-duty truck surface coating.
- (b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3082, that, except as noted in paragraph (b)(1) of this section, is located at a facility which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks, and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAP). You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3082, in which you choose to include, pursuant to §63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles;