

## Tables to Subpart DDDD of Part 63

**Table 1A to Subpart DDDD of Part 63--Production-Based Compliance Options**

For the following process units . . .

	<b>You must meet the following production-based compliance option (total HAPa basis)</b>
(1) Fiberboard mat dryer heated zones (at new affected sources only)	0.022 lb/MSF 1/2".
(2) Green rotary dryers	0.058 lb/ODT.
(3) Hardboard ovens	0.022 lb/MSF 1/8".
(4) Press predryers (at new affected sources only)	0.037 lb/MSF 1/2".
(5) Pressurized refiners	0.039 lb/ODT.
(6) Primary tube dryers	0.26 lb/ODT.
(7) Reconstituted wood product board coolers (at new affected sources only)	0.014 lb/MSF 3/4".
(8) Reconstituted wood product presses	0.30 lb/MSF 3/4".
(9) Softwood veneer dryer heated zones	0.022 lb/MSF 3/8".
(10) Rotary strand dryers	0.18 lb/ODT.
(11) Secondary tube dryers	0.010 lb/ODT.

a Total HAP, as defined in § 63.2292, includes acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde. lb/ODT = pounds per oven-dried ton; lb/MSF = pounds per thousand square feet with a specified thickness basis (inches). Section 63.2262(j) shows how to convert from one thickness basis to another.

**Note:** There is no production-based compliance option for conveyor strand dryers.

**Table 1B to Subpart DDDD of Part 63--Add-On Control Systems Compliance Options**

For each of the following process units

	<b>You must comply with one of the following six compliance options by using an emissions control system</b>
Fiberboard mat dryer heated zones (at new affected sources only); green rotary dryers; hardboard ovens; press predryers (at new affected sources only); pressurized refiners; primary tube dryers; secondary tube dryers; reconstituted wood product board coolers (at new affected sources only); reconstituted wood product presses; softwood veneer dryer heated zones; rotary strand dryers; conveyor strand dryer zone one (at existing affected sources); and conveyor strand dryer zones one and two (at new affected sources).	<p>(1) Reduce emissions of total HAP, measured as THC (as carbon) a, by 90 percent; or</p> <p>(2) Limit emissions of total HAP, measured as THC (as carbon) a, to 20 ppmvd; or</p> <p>(3) Reduce methanol emissions by 90 percent; or</p> <p>(4) Limit methanol emissions to less than or equal to 1 ppmvd if uncontrolled methanol emissions entering the control device are greater than or equal to 10 ppmvd; or</p> <p>(5) Reduce formaldehyde emissions by 90 percent; or</p> <p>(6) Limit formaldehyde emissions to less than or equal to 1 ppmvd if uncontrolled formaldehyde emissions entering the control device are greater than or equal to 10 ppmvd.</p>

a You may choose to subtract methane from THC as carbon measurements.

**Table 2 to Subpart DDDD of Part 63--Operating Requirements**

<b>If you operate a(n)</b>	<b>You must</b>	<b>Or you must</b>
(1) Thermal oxidizer	Maintain the 3-hour block average firebox temperature above the minimum temperature established during the performance test.	Maintain the 3-hour block average THC concentration a in the thermal oxidizer exhaust below the maximum concentration established during the performance test.
(2) Catalytic oxidizer	Maintain the 3-hour block average catalytic oxidizer temperature above the minimum temperature established during the performance test; AND check the activity level of a representative sample of the catalyst at least every 12 months.	Maintain the 3-hour block average THC concentration a in the catalytic oxidizer exhaust below the maximum concentration established during the performance test.
(3) Biofilter	Maintain the 24-hour block biofilter bed temperature within the range established according to § 63.2262(m).	Maintain the 24-hour block average THC concentration a in the biofilter exhaust below the maximum concentration established during the performance test.
(4) Control device other than a thermal oxidizer, catalytic oxidizer, or biofilter.	Petition the EPA Administrator for site-specific operating parameter(s) to be established during the performance test and maintain the average operating parameter(s) within the range(s) established during the performance test.	Maintain the 3-hour block average THC concentration a in the control device exhaust below the maximum concentration established during the performance test.
(5) Process unit that meets a compliance option in Table 1A of this subpart, or a process unit that generates debits in an emissions average without the use of a control device.	Maintain on a daily basis the process unit controlling operating parameter(s) within the ranges established during the performance test according to § 63.2262(n).	Maintain the 3-hour block average THC concentration a in the process unit exhaust below the maximum concentration established during the performance test.

a You may choose to subtract methane from THC measurements.

### Table 3 to Subpart DDDD of Part 63--Work Practice Requirements

**For the following process units at existing or new affected sources**      **You must**

(1) Dry rotary dryers	Process furnish with a 24-hour block average inlet moisture content of less than or equal to 30 percent (by weight, dry basis); AND operate with a 24-hour block average inlet dryer temperature of less than or equal to 600°F.
(2) Hardwood veneer dryers	Process less than 30 volume percent softwood species on an annual basis.
(3) Softwood veneer dryers	Minimize fugitive emissions from the dryer doors through (proper maintenance procedures) and the green end of the dryers (through proper balancing of the heated zone exhausts).
(4) Veneer redryers	Process veneer that has been previously dried, such that the 24-hour block average inlet moisture content of the veneer is less than or equal to 25 percent (by weight, dry basis).
(5) Group 1 miscellaneous coating operations	Use non-HAP coatings as defined in § 63.2292.

### Table 4 to Subpart DDDD of Part 63--Requirements for Performance Tests

<b>For</b>	<b>You must</b>	<b>Using</b>
(1) Each process unit subject to a compliance option in Table 1A or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Select sampling port's location and the number of traverse ports.	Method 1 or 1A of 40 CFR part 60, appendix A (as appropriate).
(2) Each process unit subject to a compliance option in Table 1A or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Determine velocity and volumetric flow rate	Method 2 in addition to Method 2A, 2C, 2D, 2F, or 2G in appendix A to 40 CFR part 60 (as appropriate).
(3) Each process unit subject to a compliance option in Table 1A or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Conduct gas molecular weight analysis	Method 3, 3A, or 3B in appendix A to 40 CFR part 60 (as appropriate).
(4) Each process unit subject to a compliance option in Table 1A or 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Measure moisture content of the stack gas	Method 4 in appendix A to 40 CFR part 60; OR Method 320 in appendix A to 40 CFR part 63; OR ASTM D6348–03 (IBR, see § 63.14(b)).
(5) Each process unit subject to a compliance option in Table 1B to this subpart for which you choose to demonstrate compliance using a total HAP as THC compliance option.	Measure emissions of total HAP as THC	Method 25A in appendix A to 40 CFR part 60. You may measure emissions of methane using EPA Method 18 in appendix A to 40 CFR part 60 and subtract the methane emissions from the emissions of total HAP as THC.
(6) Each process unit subject to a compliance option in Table 1A to this subpart; or for each process unit used in calculation of an emissions average under § 63.2240(c).	Measure emissions of total HAP (as defined in § 63.2292).	Method 320 in appendix A to 40 CFR part 63; OR the NCASI Method IM/CAN/WP–99.02 (IBR, see § 63.14(f)); OR ASTM D6348–03 (IBR, see § 63.14(b)) provided that percent R as determined in Annex A5 of ASTM D6348–03 is equal or greater than 70 percent and less than or equal to 130 percent.
(7) Each process unit subject to a compliance option in Table 1B to this subpart for which you choose to demonstrate compliance using a methanol compliance option.	Measure emissions of methanol	Method 308 in appendix A to 40 CFR part 63; OR Method 320 in appendix A to 40 CFR part 63; OR the NCASI Method CI/WP–98.01 (IBR, see § 63.14(f)); OR the NCASI Method IM/CAN/WP–99.02 (IBR, see § 63.14(f)).
(8) Each process unit subject to a compliance option in Table 1B to this subpart for which you choose to demonstrate compliance using a formaldehyde compliance option.	Measure emissions of formaldehyde	Method 316 in appendix A to 40 CFR part 63; OR Method 320 in appendix A to 40 CFR part 63; OR Method 0011 in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (EPA Publication No. SW–846) for formaldehyde; OR the NCASI Method CI/WP–98.01 (IBR, see § 63.14(f)); OR the NCASI Method IM/CAN/WP–

(9) Each reconstituted wood product press at a new or existing affected source or reconstituted wood product board cooler at a new affected source subject to a compliance option in Table 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).

Meet the design specifications included in the definition of wood products enclosure in § 63.2292  
OR  
Determine the percent capture efficiency of the enclosure directing emissions to an add-on control device.

99.02 (IBR, see § 63.14(f)).  
Methods 204 and 204A through 204F of 40 CFR part 51, appendix M, to determine capture efficiency (except for wood products enclosures as defined in § 63.2292). Enclosures that meet the definition of wood products enclosure or that meet Method 204 requirements for a permanent total enclosure (PTE) are assumed to have a capture efficiency of 100 percent. Enclosures that do not meet either the PTE requirements or design criteria for a wood products enclosure must determine the capture efficiency by constructing a TTE according to the requirements of Method 204 and applying Methods 204A through 204F (as appropriate). As an alternative to Methods 204 and 204A through 204F, you may use tracer gas method contained in appendix A to this subpart.  
A TTE and Methods 204 and 204A through 204F (as appropriate) of 40 CFR part 51, appendix M. As an alternative to installing a TTE and using methods 204 and 204A through 204F, you may use the tracer gas method contained in appendix A to this subpart.  
Data from the parameter monitoring system or THC CEMS and the applicable performance test method(s).

(10) Each reconstituted wood product press at a new or existing affected source or reconstituted wood product board cooler at a new affected source subject to a compliance option in Table 1A to this subpart.

Determine the percent capture efficiency

(11) Each process unit subject to a compliance option in Table 1A and 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).

Establish the site-specific operating requirements (including the parameter limits or THC concentration limits) in Table 2 to this subpart.

**Table 5 to Subpart DDDD of Part 63--Performance Testing and Initial Compliance Demonstrations for the Compliance Options and Operating Requirements**

For each	For the following compliance options and operating requirements	You have demonstrated initial compliance if
(1) Process unit listed in Table 1A to this subpart.	Meet the production-based compliance options listed in Table 1A to this subpart.	The average total HAP emissions measured using the methods in Table 4 to this subpart over the 3-hour performance test are no greater than the compliance option in Table 1A to this subpart; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions did not exceed the compliance option value.
(2) Process unit listed in Table 1B to this subpart.	Reduce emissions of total HAP, measured as THC, by 90 percent.	Total HAP emissions, measured using the methods in Table 4 to this subpart over the 3-hour performance test, are reduced by at least 90 percent, as calculated using the procedures in § 63.2262; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions were reduced by at least 90 percent.
(3) Process unit listed in Table 1B to this subpart.	Limit emissions of total HAP, measured as THC, to 20 ppmvd.	The average total HAP emissions, measured using the methods in Table 4 to this subpart over the 3-hour performance test, do not exceed 20 ppmvd; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions did not exceed 20 ppmvd.
(4) Process unit listed in Table 1B	Reduce methanol or formaldehyde emissions	The methanol or formaldehyde emissions

to this subpart.	by 90 percent.	measured using the methods in Table 4 to this subpart over the 3-hour performance test, are reduced by at least 90 percent, as calculated using the procedures in § 63.2262; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions were reduced by at least 90 percent.
(5) Process unit listed in Table 1B to this subpart.	Limit methanol or formaldehyde emissions to less than or equal to 1 ppmvd (if uncontrolled emissions are greater than or equal to 10 ppmvd).	The average methanol or formaldehyde emissions, measured using the methods in Table 4 to this subpart over the 3-hour performance test, do not exceed 1 ppmvd; AND you have a record of the operating requirement(s) listed in Table 2 to this subpart for the process unit over the performance test during which emissions did not exceed 1 ppmvd. If the process unit is a reconstituted wood product press or a reconstituted wood product board cooler, your capture device either meets the EPA Method 204 criteria for a PTE or achieves a capture efficiency of greater than or equal to 95 percent.
(6) Reconstituted wood product press at a new or existing affected source, or reconstituted wood product board cooler at a new affected source.	Compliance options in Tables 1A and 1B to this subpart or the emissions averaging compliance option in § 63.2240(c).	You submit the results of capture efficiency verification using the methods in Table 4 to this subpart with your Notification of Compliance Status.
(7) Process unit listed in Table 1B to this subpart controlled by routing exhaust to a combustion unit.	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in § 63.2240(c).	You submit with your Notification of Compliance Status documentation showing that the process exhausts controlled enter into the flame zone of your combustion unit.
(8) Process unit listed in Table 1B to this subpart using a wet control device as the sole means of reducing HAP emissions.	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in § 63.2240(c).	You submit with your Notification of Compliance Status your plan to address how organic HAP captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere.

**Table 6 to Subpart DDDD of Part 63--Initial Compliance Demonstrations for Work Practice Requirements**

<b>For each</b>	<b>For the following work practice requirements</b>	<b>You have demonstrated initial compliance if</b>
(1) Dry rotary dryer	Process furnish with an inlet moisture content less than or equal to 30 percent (by weight, dry basis) AND operate with an inlet dryer temperature of less than or equal to 600 °F.	You meet the work practice requirement AND you submit a signed statement with the Notification of Compliance Status that the dryer meets the criteria of a “dry rotary dryer” AND you have a record of the inlet moisture content and inlet dryer temperature (as required in § 63.2263).
(2) Hardwood veneer dryer	Process less than 30 volume percent softwood species.	You meet the work practice requirement AND you submit a signed statement with the Notification of Compliance Status that the dryer meets the criteria of a “hardwood veneer dryer” AND you have a record of the percentage of softwoods processed in the dryer (as required in § 63.2264).
(3) Softwood veneer dryer	Minimize fugitive emissions from the dryer doors and the green end.	You meet the work practice requirement AND you submit with the Notification of Compliance Status a copy of your plan for

		minimizing fugitive emissions from the veneer dryer heated zones (as required in § 63.2265).
(4) Veneer redryers	Process veneer with an inlet moisture content of less than or equal to 25 percent (by weight, dry basis).	You meet the work practice requirement AND you submit a signed statement with the Notification of Compliance Status that the dryer operates only as a redryer AND you have a record of the veneer inlet moisture content of the veneer processed in the redryer (as required in § 63.2266).
(5) Group 1 miscellaneous coating operations	Use non-HAP coatings as defined in § 63.2292.	You meet the work practice requirement AND you submit a signed statement with the Notification of Compliance Status that you are using non-HAP coatings AND you have a record showing that you are using non-HAP coatings.

**Table 7 to Subpart DDDD of Part 63--Continuous Compliance With the Compliance Options and Operating Requirements**

<b>For</b>	<b>For the following compliance options and operating requirements</b>	<b>You must demonstrate continuous compliance by</b>
(1) Each process unit listed in Table 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in § 63.2240(c) and the operating requirements in Table 2 to this subpart based on monitoring of operating parameters.	Collecting and recording the operating parameter monitoring system data listed in Table 2 to this subpart for the process unit according to § 63.2269(a) through (b) and § 63.2270; AND reducing the operating parameter monitoring system data to the specified averages in units of the applicable requirement according to calculations in § 63.2270; AND maintaining the average operating parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established according to § 63.2262.
(2) Each process unit listed in Tables 1A and 1B to this subpart or used in calculation of an emissions average under § 63.2240(c).	Compliance options in Tables 1A and 1B to this subpart or the emissions averaging compliance option in § 63.2240(c) and the operating requirements in Table 2 of this subpart based on THC CEMS data.	Collecting and recording the THC monitoring data listed in Table 2 to this subpart for the process unit according to § 63.2269(d); AND reducing the CEMS data to 3-hour block averages according to calculations in § 63.2269(d); AND maintaining the 3-hour block average THC concentration in the exhaust gases less than or equal to the THC concentration established according to § 63.2262.
(3) Each process unit using a biofilter	Compliance options in Tables 1B to this subpart or the emissions averaging compliance option in § 63.2240(c).	Conducting a repeat performance test using the applicable method(s) specified in Table 4 to this subpart within 2 years following the previous performance test and within 180 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.
(4) Each process unit using a catalytic oxidizer	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in § 63.2240(c).	Checking the activity level of a representative sample of the catalyst at least every 12 months and taking any necessary corrective action to ensure that the catalyst is performing within its design range.
(5) Each process unit listed in Table 1A to this subpart, or each process unit without a control device used in calculation of an emissions averaging debit under §	Compliance options in Table 1A to this subpart or the emissions averaging compliance option in § 63.2240(c) and the operating requirements in Table 2 to this	Collecting and recording on a daily basis process unit controlling operating parameter data; AND maintaining the operating parameter at or above the

63.2240(c).	subpart based on monitoring of process unit controlling operating parameters.	minimum, at or below the maximum, or within the range (whichever applies) established according to § 63.2262.
(6) Each Process unit listed in Table 1B to this subpart using a wet control device as the sole means of reducing HAP emissions.	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in § 63.2240(c).	Implementing your plan to address how organic HAP captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere.

**Table 8 to Subpart DDDD of Part 63--Continuous Compliance With the Work Practice Requirements**

For	For the following work practice requirements	You must demonstrate continuous compliance by
(1) Dry rotary dryer	Process furnish with an inlet moisture content less than or equal to 30 percent (by weight, dry basis) AND operate with an inlet dryer temperature of less than or equal to 600 °F.	Maintaining the 24-hour block average inlet furnish moisture content at less than or equal to 30 percent (by weight, dry basis) AND maintaining the 24-hour block average inlet dryer temperature at less than or equal to 600 °F; AND keeping records of the inlet temperature of furnish moisture content and inlet dryer temperature.
(2) Hardwood veneer dryer	Process less than 30 volume percent softwood species.	Maintaining the volume percent softwood species processed below 30 percent AND keeping records of the volume percent softwood species processed.
(3) Softwood veneer dryer	Minimize fugitive emissions from the dryer doors and the green end.	Following (and documenting that you are following) your plan for minimizing fugitive emissions.
(4) Veneer redryers	Process veneer with an inlet moisture content of less than or equal to 25 percent (by weight, dry basis).	Maintaining the 24-hour block average inlet moisture content of the veneer processed at or below of less than or 25 percent AND keeping records of the inlet moisture content of the veneer processed.
(5) Group 1 miscellaneous coating operations	Use non-HAP coatings as defined in § 63.2292.	Continuing to use non-HAP coatings AND keeping records showing that you are using non-HAP coatings.

**Table 9 to Subpart DDDD of Part 63--Requirements for Reports**

You must submit a(n)	The report must contain	You must submit the report
(1) Compliance report	The information in § 63.2281(c) through (g)	Semiannually according to the requirements in § 63.2281(b).
(2) immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP.	(i) Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	(ii) The information in § 63.10(d)(5)(ii)	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

**Table 10 to Subpart DDDD of Part 63--Applicability of General Provisions to Subpart DDDD**  
Applicability of the General Provisions can be found in Appendix C of this subpart.