

ADEQ

ARKANSAS
Department of Environmental Quality

December 12, 2008

DeWayne Henry, Environmental Coordinator
Georgia-Pacific Wood Products, LLC Fordyce OSB
PO Box 1095
Fordyce, AR 71742

Dear Mr. Henry:

The enclosed Permit No. 1803-AOP-R6 is issued pursuant to the Arkansas Operating Permit Program, Regulation # 26.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 1803-AOP-R6 for the construction, operation and maintenance of an air pollution control system for Georgia-Pacific Wood Products, LLC Fordyce OSB to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under §2.1.14 of Regulation No. 8, Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, within thirty (30) days after service of this decision.

All persons submitting written comments during this thirty (30) day period, and all other persons entitled to do so, may request an adjudicatory hearing and Commission review on whether the decision of the Director should be reversed or modified. Such a request shall be in the form and manner required by §2.1.14 of Regulation No. 8.

Sincerely,



Mike Bates
Chief, Air Division

RESPONSE TO COMMENTS

**Georgia Pacific Wood Products, LLC Fordyce OSB
DRAFT PERMIT #1803-AOP-R6
AFIN: 07-00212**

On August 13, 2008 the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period Georgia Pacific submitted comments, data, views or arguments on the draft permitting decision. The Department's response to these issues follows.

Issue 1:

Comment #1 (Page 5) – Please revise the second paragraph of the Summary of Permit Activity as shown below.

Specific Conditions for SN-02 ~~are~~ **have** also been clarified as the facility is authorized to have the option of operating the oxidizer either as a TCO or RTO.

The modification incorporates the provisions of 40 CFR Part 63, Subpart DDDD, *National Emissions Standards for Hazardous Air Pollutants: **Plywood and Composite Wood Panels**, ~~for Surface Coating of Wood Building Products~~*, includes an allowance for the Routine Control Device Maintenance for the Dryer RTOs and the Press RTO/TCO, and permits the existing Stencil/Marking/Logo application (SN-11). Specific Conditions for SN-02 ~~are~~ **have** also been clarified as the facility is authorized to have the option of operating the oxidizer either as a TCO or RTO. The facility also proposes to modify the specific conditions for SN-10, the overlay application process to allow the flexibility to utilize alternative adhesives and increase the adhesive application hourly rate from 0.75 lb per 4' x 8' panel to 0.85 lb per 4' x 8' panel. Permitted emissions include: increase of PM/PM₁₀, VOC, CO, acetaldehyde, formaldehyde, methanol, vinyl acetate, and total HAPs by 7.1 tpy, 23.5 tpy, 0.5 tpy, 1.71 tpy, 1.3 tpy, 1.3 tpy, 2.0 tpy, and 1.28 tpy respectively.

Response 1:

The error has been corrected.

Issue 2:

Comment #2 (Page 6) – Please revise the following sentence in Forming and Pressing process description to indicate that the two natural gas-fired burners are covered under SN-01A.

Two 30 MMBTU/hr natural gas-fired burners (~~EP-1A~~, SN-01A) are included in the thermal oil units as well for back-up purposes.

Response 2:

The change has been made.

Issue 3:

Comment #3 (Page 7) – Please revise the following paragraph under the Regulation section to match up the emissions with those listed in the Emission Summary Table.

Formaldehyde emissions for this facility are ~~27.94~~ **29.1** tons per year, methanol emissions are ~~45.60~~ **47.1** tons per year, and phenol emissions are 10.54 tons per year. As such, the facility is subject to MACT review under 112(g).

Response 3:

The errors have been corrected.

Issue 4:

Comment #4 (Page 10) – Please add the following note at the end of the Emission Summary table to provide an explanation for the VOC and HAP emission rates included within SN-10. The intent of the note is to clarify why the sum of the individual HAP emission rates is higher than the VOC emission rate.

******* The overlay application process included within SN-10 must use materials (i.e., adhesives) that meet both a VOC limit and a HAP limit. The HAP content of the adhesive utilized in the process may vary within permitted limits, but the adhesive must also meet the overall VOC emission limit. Refer to Specific Condition 67 for VOC and HAP content limits for adhesive material used in the overlay application process.***

Response 4:

The explanation has been included at the end of the Emission Summary Table.

Issue 5:

Comment #5 (Page 13) – Please revise Specific Condition 2 as shown below to reference Plantwide Condition 7.

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #8 and #15(a)(ii), Plantwide Condition #7 #14, and equipment limitations. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Response 5:

The error has been corrected.

Issue 6:

Comment #6 (Page 15) – Please remove Specific Condition 8, Specific Condition 9, and Specific Condition 10. The performance and demonstration of compliance for the RTOs are addressed by the PCWP MACT requirements as referenced in Specific Condition 15.

(Note: Please remove reference to Specific Condition 8 in Specific Conditions 1, 2, and 3.)

- ~~8. The RTOs shall have a maximum volumetric flow rate of 120% of the maximum air flow established during the compliance test. [Regulation 19, §19.303, §19.901 et seq. of Regulation #19, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]~~
- ~~9. The permittee shall maintain continuous records which demonstrate compliance with Specific Condition #8. Readings will be recorded every 15 minutes and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq. of Regulation #19, and 40 CFR Part 52] Do we need this condition anymore since the PCWP MACT requires a 3-hour block average. Can we request this requirement be deleted.~~
- ~~10. The permittee shall maintain continuous records of the static pressure at the inlet of each ID fan. Readings will be recorded hourly and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.~~

~~[Regulation 19, §19.705, §19.901 et seq. of Regulation #19, and 40 CFR Part 52, Subpart E]~~

Response 6:

Specific Condition 15a requires the facility to maintain the temperature while Specific Conditions 8, 9, and 10 requires air flow rate of RTO and static pressure of ID fans parameters to be maintained and recordkeeping. It is essential to have not just the temperature but other parameters to ensure proper operations of the RTO. No changes have been made.

Issue 7:

Comment #7 (Page 16) – Please revise Specific Condition 15.a.i as shown below to allow the facility the flexibility to utilize the other available options in Table 1B of 40 CFR Part 63 Subpart DDDD.

- i. The permittee must comply by using an emission control system (SN-01) to reduce emissions of total HAP, measured as THC (as carbon)^a, by 90 percent **or the permittee must comply by using an emission control system that meets one of the compliance options included in Table 1B of 40 CFR Part 63 Subpart DDDD;**

Response 7:

Specific Condition 15.a.i has been revised to allow the facility to have the flexibility to utilize the other available options in Table 1B of 40 CFR Part 63 Subpart DDDD.

Issue 8:

Comment #8 (Page 17) – Please revise Specific Condition 15.c.i as shown below to allow the facility the flexibility to utilize the other available options in Table 4 of 40 CFR Part 63 Subpart DDDD.

- i. The permittee must demonstrate a reduction in emissions of total HAP as THC using Method 25A over a 3-hour performance test for SN-01 **(or other appropriate method specified in Table 4 of 40 CFR Part 63 Subpart DDDD)** and record operating parameters listed in Specific Condition 15(a) and submit the results with the Notification of Compliance Status before the close of business on the 60th calendar day after completion of the performance test. The permittee shall submit

notification of Performance Test required at least 60 calendar days prior to the initial or any subsequent performance test.

Response 8:

Performance test method in draft Specific Condition 15.c.1 is the only method proposed in the application. The permittee may use other approved method in the subpart.

Specific Condition 15.c.i has been revised to include the proposed language.

Issue 9:

Comment #9 (Page 18) – Please revise Specific Condition 15.h as shown below. This due date has already past and there could potentially be revisions to the PCWP MACT regulation that could impact some of the requirements.

h. The permittee must develop and implement a Startup, Shutdown, and Malfunction Plan (SSM) that covers each applicable emission limitation or work practice standard by ~~October 1, 2007~~ **the applicable compliance due date**. If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation No. 19 §19.304 and 40 CFR 63.6(e)(3)]

Response 9:

The changes have been made.

Issue 10:

Comment #10 (Page 23) – Please remove Specific Condition 27 and Specific Condition 28. Both the performance and demonstration of compliance for the TCO/RTO are addressed by the PCWP MACT requirements as referenced in Specific Condition 33.

(Note: Please remove reference to Specific Condition 27 in Specific Conditions 21 and 22.)

~~27. The TCO/RTO shall have a maximum volumetric flow rate of 120% of the maximum air flow established during the compliance test. [Regulation 19, §19.303, §19.901 et seq., 40 CFR Part 52, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]~~

~~28. The permittee shall maintain continuous records which demonstrate compliance with Specific Condition #27. Readings will be recorded every 15 minutes and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq., and 40 CFR Part 52, Subpart E]~~

~~29. The permittee shall maintain continuous records of the static pressure at the inlet of each ID fan. Readings will be recorded hourly and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq., and 40 CFR Part 52, Subpart E]~~

Response 10:

See Response 6.

Issue 11:

Comment #11 (Page 24) – Please revise Specific Condition 33.a.i as shown below to allow the facility the flexibility to utilize the other available options in Table 1B of 40 CFR Part 63 Subpart DDDD.

- a. The permittee must use an emissions control system and demonstrate that the resulting emissions meet the **compliance options and** operating requirements in Tables **1B and 2** to this subpart.
 - i. The permittee must comply by using an emission control system (SN-02) to reduce emissions of total HAP, measured as THC (as carbon)a, by 90 percent **or the permittee must comply by using an emission control system that meets one of the compliance options included in Table 1B of 40 CFR Part 63 Subpart DDDD;**

Response 11:

The compliance option included in the draft permit is the only proposed compliance option in the application. The permittee may use other compliance options permitted in Table 1B of the subpart.

The changes have been made.

Issue 12:

Comment #12 (Page 24) – Please revise Specific Condition 33.b.i as shown below to allow the facility the flexibility to utilize the other available options in Table 4 of 40 CFR Part 63 Subpart DDDD. Also, please make revision to reference SN-02 instead of SN-01 and reference SC 33(a) instead of 15(a).

- i. The permittee must demonstrate a reduction in emissions of total HAP as THC using Method 25A over a 3-hour performance test for ***SN-02 SN-01 (or other appropriate method specified in Table 4 of 40 CFR Part 63 Subpart DDDD)*** and record operating parameters listed in Specific Condition ***33(a) 45(a)*** and submit the results with the Notification of Compliance Status before the close of business on the 60th calendar day after completion of the performance test. The permittee shall submit notification of Performance Test required at least 60 calendar days prior to the initial or any subsequent performance test.

Response 12:

Performance test method in draft Specific Condition 15.c.1 is the only method proposed in the application. The permittee may use other approved method in the subpart.

The changes have been made.

Issue 13:

Comment #13 (Page 41) – Please add the following note to the table in Specific Condition 63 to provide an explanation for the VOC and HAP emission rates. The intent of the note is to clarify why the sum of the individual HAP emission rates is higher than the VOC emission rate.

******* The overlay application process included within SN-10 must use materials (i.e., adhesives) that meet both a VOC limit and a HAP limit. The HAP content of the adhesive utilized in the process may vary within permitted limits, but the adhesive must also meet the overall VOC emission limit. Refer to Specific Condition 67 for VOC and HAP***

content limits for adhesive material used in the overlay application process.

Response 13:

The note has been included to the table in Specific Condition 63.

Issue 14:

Comment #14 (Page 41) – Please revise Specific Condition 65 as shown below. This change is requested to clarify that only the Debarker is required to have weekly observations of the opacity conducted and recorded.

65. The permittee shall conduct weekly observations of the opacity from ~~source~~ ***the Debarker within*** SN-10 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

Response 14:

The clarification has been made. Now, the permittee only requires to conduct weekly observation for the debarker and the bark hog within SN-10.

Issue 15:

Comment #15 (Page 42) – Please revise Specific Condition 66 as shown below. This change is requested to clarify that only the Overlay Application Process within SN-10 is subject to 40 CFR Part 63 Subpart QQQQ and that the other sources within SN-10 are not subject to these requirements.

66. *The Overlay Application Process within* SN-10 is subject to and shall comply with applicable provisions of 40 CFR Part 63, Subpart QQQQ – *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products*. Applicable provisions of Subpart QQQQ include, but are not limited to, the following: [Regulation No. 19 §19.304 and 40 CFR §63.4681]

Response 15:

The clarification has been made.

Issue 16:

Comment #16 (Page 43) – Please add the following note to the table in Specific Condition 67 to provide an explanation for the VOC and HAP content limits. The intent of the note is to clarify why the sum of the individual HAP content limits is higher than the VOC content limit.

******* The overlay application process included within SN-10 must use materials (i.e., adhesives) that meet both a VOC content limit and a HAP content limit. The HAP content of the adhesive utilized in the process may vary within permitted limits, but the adhesive must also meet the overall VOC content limit.***

Response 16:

The note has been included to the table in Specific Condition 67.

Issue 17:

Comment #17 (Page 43) – Please revise Specific Condition 68 as shown below.

68. The permittee shall maintain records which demonstrate compliance with ~~Interim Condition #4~~ **Specific Condition 67**. The permittee will maintain a twelve month rolling total and each individual month's data on-site and made available to Department personnel upon request. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Response 17:

The error has been corrected.

Issue 18:

Comment #18 (Page 44) – Please revise Specific Condition 69 as shown below.

69. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these limits shall be demonstrated by compliance with Specific Condition ~~69~~ **71**. [Regulation No. 19 §19.501 *et seq.* effective October 15, 2007, and 40 CFR Part 52, Subpart E]

Response 18:

The typographical error has been corrected.

Issue 19:

Comment #19 (Page 44) – Please revise Specific Condition 70 as shown below.

70. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these limits shall be ~~demonstrates~~ **demonstrated** by compliance with Specific ~~Conditions 71~~ **Condition 73**. [Regulation No. 18 §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Response 19:

The errors have been corrected.

Issue 20:

Comment #20 (Page 44) – Please revise Specific Condition 72 as shown below.

72. The permittee will calculate and maintain monthly records to demonstrate compliance with Specific Condition ~~No. 69~~ **71**. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

Response 20:

The error has been corrected.

Issue 21:

Comment #21 (Page 44) – Please revise Specific Condition 74 as shown below.

74. The permittee shall maintain records which demonstrate compliance with Specific Condition ~~74~~ **73**. These records shall be kept on site, and shall be made available to Department personnel upon request. [Regulation No. 19 §19.702 and §19.901 *et seq.* and 40 CFR Part 52.21, Subpart E]

Response 21:

The error has been corrected.

Issue 22:

Comment #22 (Page 45) – Please revise Specific Condition 76 as shown below.

76. The permittee shall report each deviation to the work practice requirement to use only non-HAP coatings as specified in Specific Condition ~~74~~ **73**. These deviations shall be reported in accordance with §63.2281. If there are no deviations from the non-HAP coating requirements, the permittee shall submit a statement that there were no deviations from the work practice requirements during the reporting period. [Regulation No. 19 §19.304 and 40 CFR §63.2271]

Response 22:

The error has been corrected.

Issue 23:

Comment #23 (Page 48) – Please revise Plantwide Condition 8 as shown below.

8. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Plantwide Condition #7. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General ~~Condition~~ **Provision #7**. [Regulation 19, §19.705, §19.901 *et seq.*, and 40 CFR Part 52, Subpart E]

Response 23:

The error has been corrected.

Issue 24:

Comment #24 (Page 48) – Please revise Plantwide Condition 9 as shown below.

9. The permittee shall conduct routine maintenance on the control device during operations only in the following scenarios:
 - a. Maintenance can be performed on either one of the Dryer RTOs and the Press RTO/TCO at the same time for a period of any 4 hours between the hours of 8 a.m. and 4 p.m., during which time the other **Dryer RTO RTOs** shall operate normally to control emissions from three of five dryers, one dryer must be shutdown, and the remaining fifth dryer may be exhausted without emissions controls;
 - b. Maintenance on the Press RTO/TCO can be performed for any length of time between the hours of 2 a.m. and 10 p.m. with both ~~the Dryers~~ **Dryer RTOs** operating **normally**. ~~with emissions control.~~
[Regulation 19, §19.502, and 40 CFR Part 52, Subpart E]

Response 24:

The permittee may operate the dryers with either RTO or TCO as emission control as in the draft Plantwide Condition 9. With the permittee proposing to operate both dryer with RTO as the only control, the Department grants the request.

The changes have been made.

Issue 25:

Comment #25 (Page 48) – Please revise Plantwide Condition 11 as shown below.

11. The permittee shall maintain records which demonstrate compliance with Plantwide Conditions #9 and 10. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General ~~Condition~~ **Provision #7**. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

Response 25:

The error has been corrected.

ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 1803-AOP-R6

IS ISSUED TO:


Georgia-Pacific Wood Products, LLC Fordyce OSB
#1 Georgia-Pacific Road
Fordyce, AR 71742
Calhoun County
AFIN: 07-00212

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

July 8, 2004 AND July 7, 2009

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:



Mike Bates
Chief, Air Division

December 12, 2008

Date Modified

Georgia-Pacific Wood Products, LLC Fordyce OSB
Permit #: 1803-AOP-R6
AFIN: 07-00212

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Georgia-Pacific Wood Products, LLC Fordyce OSB
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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM10	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Georgia-Pacific Wood Products, LLC Fordyce OSB
Permit #: 1803-AOP-R6
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SECTION I: FACILITY INFORMATION

PERMITTEE: Georgia-Pacific Wood Products, LLC Fordyce OSB

AFIN: 07-00212

PERMIT NUMBER: 1803-AOP-R6

FACILITY ADDRESS: #1 Georgia-Pacific Road
Fordyce, AR 71742

MAILING ADDRESS P.O. Box 1095
Fordyce, AR 71742

COUNTY: Calhoun

CONTACT POSITION: Dewayne Henry, Environmental Coordinator

TELEPHONE NUMBER: (870) 352-7252

REVIEWING ENGINEER: Siew Low

UTM North South (Y): Zone 15: 3,735.9 km

UTM East West (X): Zone 15: 558.6 km

Georgia-Pacific Wood Products, LLC Fordyce OSB
Permit #: 1803-AOP-R6
AFIN: 07-00212

SECTION II: INTRODUCTION

Summary of Permit Activity

Georgia-Pacific Wood Products, LLC Fordyce OSB owns and operates an oriented strandboard (OSB) facility near Fordyce, Arkansas. This facility currently has the capacity to produce 600 million square feet (MMSF), on a 3/8-inch basis, of OSB annually. This facility includes five dryers, a press, and associated materials handling equipment.

The modification incorporates the provisions of 40 CFR Part 63, Subpart DDDD, *National Emissions Standards for Hazardous Air Pollutants: Plywood and Composite Wood Panels*, includes an allowance for the Routine Control Device Maintenance for the Dryer RTOs and the Press RTO/TCO, and permits the existing Stencil/Marking/Logo application (SN-11). Specific Conditions for SN-02 have also been clarified as the facility is authorized to have the option of operating the oxidizer either as a TCO or RTO. The facility also proposes to modify the specific conditions for SN-10, the overlay application process to allow the flexibility to utilize alternative adhesives and increase the adhesive application hourly rate from 0.75 lb per 4' x 8' panel to 0.85 lb per 4' x 8' panel. Permitted emissions include: increase of PM/PM₁₀, VOC, CO, acetaldehyde, formaldehyde, methanol, vinyl acetate, and total HAPs by 7.1 tpy, 23.5 tpy, 0.5 tpy, 1.71 tpy, 1.3 tpy, 1.3 tpy, 2.0 tpy, and 1.28 tpy respectively.

Process Description

Logs, resin, and wax are the primary raw materials used in OSB panel production. The production process is comprised of four principal manufacturing processes: (1) Furnish production, which includes debarking, slashing, and flaking; (2) Flake drying; (3) Forming and pressing; and (4) Finishing, which consists of sawing and sanding.

Furnish Production

Logs are unloaded and temporarily stored in the log yard. The logs are then cut to size, debarked, and processed into flakes.

Flake Drying

The drying process consists of five horizontal, cylindrical rotary drum-type flake dryers heated by suspension-type burners, and a pneumatic system which conveys the flakes through the dryers. The suspension burners are designed to burn ground wood fuel. Raw wood fuel is first ground in the hammermill (SN-09) and then stored in a metering bin. From the metering bin, the ground wood fuel is pneumatically transferred (SN-07) and blown into the burner. Maximum heat input to each dryer is 40 million British thermal units per hour (MMBTU/hr). The wood fuel is introduced tangentially to the burners, creating a cyclonic flow pattern, thereby promoting combustion efficiency.

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The hot exhaust from the burners combines with ambient air pulled through by the dryer's pneumatic system to dry the flakes. The amount of dilution air, and resulting gas temperature, are dependent on the dryer operating rate, wood moisture content, desired moisture content of the furnish, etc.

The dryers are also equipped with 40 MMBTU/hr natural gas-fired burners for back-up purposes. Air pollutant emissions associated with the drying operation include products of wood fuel combustion, such as PM, VOCs, CO, NO_x, and SO₂. They also include additional PM, VOCs, CO, and formaldehyde, which are produced in the wood drying process. The dryers are controlled by two RTOs (SN-01) that are preceded by multiclones.

One of the maintenances of RTOs is bakeout. The operation of a bakeout is to remove any accumulation of organic deposits within the ceramic media of the oxidizer. A bakeout operation holds the RTO chamber in outlet mode and raises the temperature of the bottom of the bed above 600 °F. The oxidizer must be off-line, and operating with fresh air flow only.

Forming and Pressing

The dried wood flakes are blended with resin and wax, and are then placed as a mat on the forming line (SN-08) in layers, oriented at right angles, to provide structural integrity. The oriented material is then cut to size (SN-05), and the mat is moved into the thermal-oil-heated press, where it is compressed and heated to bond the resin to the flakes. The press emissions are controlled by a thermal catalytic oxidizer (TCO, SN-02). The TCO was originally constructed and installed as an RTO, but catalytic media has since been added above the ceramic media, converting the unit to a TCO. The thermal oil, that is used to heat the press, is heated to the appropriate temperature in a separate system, consisting of two, wood fuel, suspension-type burners, rated at 40 MMBTU/hr each. Two 30 MMBTU/hr natural gas-fired burners (SN-01A) are included in the thermal oil units as well for back-up purposes. While burning wood, the exhaust gases from the thermal oil system are routed through the dryer system and exit via the multiclones and RTOs. When the thermal oil system is not burning wood and is using the natural gas-fired burners in lieu of the wood fuel burners, emissions from the natural gas-fired burners vent to the atmosphere. Air pollutant emissions associated with the board press operation include PM, VOCs, CO, NO_x and minor quantities of HAPs (e.g. formaldehyde, phenol, and methanol).

Finishing

The pressed mats are cut to size (SN-04), and the edges are sprayed with sealant to prevent swelling. Some product is routed through a specialty saw (SN-06). The finished OSB is then packed and shipped off-site. Bark from the debarkers and other green end material from the log yard is shipped off-site for use as wood fuel or for use in horticultural operations. Dry end material (SN-03) is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations. There are times when a limited amount of this wood waste is stockpiled.

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Numerous material handling operations, which represent both point sources and fugitive emission sources, are associated with the production of the OSB. Those operations that can be characterized as point sources include the screen fines with saw trim transfer pneumatics (SN-03), saw trim and finishing line pneumatics (SN-04), materials reject and flying saw pneumatics (SN-05), specialty saw and sander pneumatics (SN-06), fuel system pneumatics (SN-07), forming bin pneumatics (SN-08), and hammermill system pneumatics (SN-09). The pollutant emissions from these operations are limited to PM. Non-stack sources of air emissions (SN-10) include the bark handling (batch drops and wind erosion from storage piles), paved and unpaved roads, debarkers, bark hog, edge-sealing of finished boards, resin tank, blend house, and finished product storage. Stencils, markings and logos may be applied to the board (SN-11). Volatile organic emissions release into the general plant environment and not directly vent to the atmosphere through a stack.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective October 15, 2007
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR Part 63, Subpart DDDD, <i>National Emissions Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products</i>
40 CFR Part 63, Subpart QQQQ, <i>National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Wood Building Products</i> (SN-10)

In a memorandum, dated November 17, 1992, the US EPA recognized that there are both similarities and differences between traditional steam generating units and process dryers. In this memorandum, the EPA concluded that NSPS Subparts Db and Dc do not apply to process dryers.

Section 112(g) of the Clean Air Act requires that each newly constructed “major” emission source of hazardous air pollutants (HAPs) meets emission limits specified in the applicable 112(d) MACT standard or resulting case-by-case MACT determination when the 112(d) standard has not yet been promulgated for the specified source category. A major source of HAPs is defined as one that emits 10 tons per year or more of a single HAP or 25 tons per year or more of all HAPs combined.

Formaldehyde emissions for this facility are 29.1 tons per year, methanol emissions are 47.1 tons per year, and phenol emissions are 10.54 tons per year. As such, the facility is subject to MACT review under 112(g).

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Under Section 112(g), the MACT limitation for new sources is defined in 40 CFR 63.41 as “The emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source.”

The HAP emissions will be controlled by the controls for the dryers and the press, regenerative thermal oxidation and thermal catalytic oxidation/regenerative thermal oxidation, respectively. Therefore, the MACT for the listed HAPs will be to control emissions to the BACT level. This level of control is consistent with other case-by-case MACT determinations for another facility.

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			Lb/hr	tpy
Total Allowable Emissions		PM	216.1	763.5***
		PM ₁₀	144.1	565.8***
		SO ₂	7.1	30.8
		VOC	214.7	947.0***
		CO	212.3	930.2***
		NO _x	89.8	393.5
		<i>Acetaldehyde*</i>	1.83	6.56
		<i>Formaldehyde*</i>	6.64	29.1
		<i>Methanol*</i>	10.95	47.1
		<i>Phenol*</i>	2.96	10.54
		<i>POM*</i>	0.001	0.0045
		<i>Vinyl Acetate*</i>	0.56	2.5
		<i>HAPs**</i>	0.87	1.28

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			Lb/hr	tpy
01	Dryers***	PM ₁₀	94.1	412.2***
		SO ₂	7.0	30.7
		VOC	159.5	698.8***
		CO	200.0	876.0
		NO _x	73.3	321.1
		PM	94.1	412.2***
		<i>Acetaldehyde*</i>	1.21	3.82
		<i>Formaldehyde*</i>	5.00	21.90
		<i>Methanol*</i>	0.84	2.85
		<i>Phenol*</i>	2.22	7.30
		<i>POM*</i>	0.001	0.0045
01A	Thermal Oil Heaters	PM ₁₀	0.3	1.0
		SO ₂	0.1	0.1
		VOC	0.2	0.8
		CO	3.1	13.3
		NO _x	3.0	13.2
		PM	0.3	1.0
02	Press***	PM ₁₀	3.5	15.5***
		VOC	25.3	110.7***
		CO	9.2	40.4***
		NO _x	13.5	59.2
		PM	3.5	15.5
		<i>Acetaldehyde*</i>	0.06	0.24
		<i>Formaldehyde*</i>	1.00	4.40
		<i>Methanol*</i>	5.14	22.50
		<i>Phenol*</i>	0.74	3.24
03	Screen Fines/Saw Trim Transfer Pneumatics	PM ₁₀	2.7	11.6
		VOC	7.8	34.2
		PM	2.7	11.6
		<i>Methanol*</i>	0.06	0.27
04	Saw Trim/Finishing Line Pneumatics	PM ₁₀	2.1	9.0
		PM	2.1	9.0
05	Mat Reject/Flying Saw Pneumatics	PM ₁₀	3.8	16.3
		PM	3.8	16.3
06	Specialty Saw/Sander Pneumatics	PM ₁₀	1.3	5.7
		VOC	4.2	18.0
		PM	1.3	5.7
		<i>Formaldehyde*</i>	0.03	0.11
		<i>Methanol*</i>	0.13	0.54

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			Lb/hr	tpy
07	Fuel System Pneumatics	PM ₁₀	0.5	1.9
		VOC	4.2	18.0
		PM	0.5	1.9
		<i>Formaldehyde*</i>	0.03	0.11
		<i>Methanol*</i>	0.13	0.54
08	Forming Bins Pneumatics	PM ₁₀	1.2	5.3
		VOC	8.9	39.0
		PM	1.2	5.3
		<i>Formaldehyde*</i>	0.25	1.08
		<i>Methanol*</i>	4.32	18.90
09	Hammermill System Pneumatics	PM ₁₀	2.7	11.6
		PM	2.7	11.6
10	Non-Stack Emission Sources****	PM ₁₀	31.9	68.6
		VOC	1.4	6.0
		PM	103.9	266.3
		<i>Acetaldehyde*</i>	0.56	2.5
		<i>Formaldehyde*</i>	0.33	1.5
		<i>Methanol*</i>	0.33	1.5
11	Stencil / Marking / Logo Application	VOC	3.2	4.7
		<i>HAPs**</i>	0.87	1.28

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

** Total HAPs emission from SN-11.

*** RCDM activities increase the total potential emissions for some pollutants. With RCDM activities, SN-01 has 419.2 tpy of PM/PM₁₀, 710.5 tpy of VOC; SN-02 has 15.6 tpy of PM/PM₁₀ and 115.8 tpy of VOC, and 40.9 tpy of CO.

**** The overlay application process included within SN-10 must use materials (i.e., adhesives) that meet both a VOC limit and a HAP limit. The HAP content of the adhesive utilized in the process may vary within permitted limits, but the adhesive must also meet the overall VOC emission limit. Refer to Specific Condition 67 for VOC and HAP content limits for adhesive material used in the overlay application process.

Italic indicates HAP.

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SECTION III: PERMIT HISTORY

Permit 1803-AOP-R0 was issued to Georgia Pacific Oriented Strandboard Facility on June 8, 1999. This was the initial permit for this facility and allowed for construction to commence. This permit was PSD for PM/PM₁₀, VOC, CO, and NO_x.

Permit 1803-AOP-R1 was issued to Georgia Pacific Oriented Strandboard Facility on June 29, 2000. This modification to the initial permit corrected the fugitive emission calculations and updated PSD modeling because of a change in stack parameters. The PSD section of this permit is included below. For the Dryer (SN-01), an RTO with multiclones was selected as BACT for PM, CO, and VOC emissions, and a low-NO_x burner design was proposed for BACT for NO_x emissions. For the Press (SN-02), RTO is selected as BACT for PM, CO, and VOC emissions, and a low-NO_x burner design is proposed for BACT for NO_x. For the Material Handling Sources, a bagfilter-type dust collector is selected as BACT for PM.

Permit 1803-AOP-R2 was issued to Georgia Pacific Oriented Strandboard Facility on January 7, 2003. This modification made the following changes:

1. Increased the permitted capacity of the plant from 475 million square feet on a 3/8-inch basis of OSB to 600 million square feet of OSB on a 3/8-inch basis. This increase in throughput was a result of under-estimation of initial equipment capacity. No new equipment was added to achieve this increase.
2. Allowed for GP to convert the Press RTO (SN-02) to a thermal catalytic oxidizer (TCO) by adding catalytic media above the existing ceramic media. The facility will have the option of operation the oxidizer either as a TCO or RTO. There will be no change in emissions or BACT associated with this change.
3. Increased the CO emission rates on the Dryer (SN-01) to allow for a lower RTO set temperature. The Dryer RTO set temperatures changed from 1,630 to 1,550 degrees Fahrenheit in an effort to slow deterioration of the ceramic media. The RTO set temperature can be reset to a higher value provided that the facility demonstrates compliance with the applicable emission limits contained in this permit.
4. Updated AP-42 emission factors for Wood Combustion and OSB Manufacturing (Sections 1.6 and 10.6 respectively).
5. Allowed for visible emissions up to 20% opacity for SN-01 and SN-02 during the performance of off-line maintenance functions (i.e., the modified bakeout of the oxidizers.)

These changes increased the pound per hour and ton per year limits, but the pound per million board foot emission rates remained unchanged except for the increase in CO emissions due to the change in RTO temperature.

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For the Dryers (SN-01), the RTO with multiclones (with a set point temperature of 1550 EF) was selected as BACT for PM, CO, and VOC emissions, and a low-NO_x burner design, combined with fuel enhancement, was proposed for BACT for NO_x. For the Press (SN-02), an RTO/TCO was selected as BACT for PM, CO, and VOC emissions, and a low-NO_x burner design was proposed for BACT for NO_x from the previous PSD permit. For the Material Handling Sources, a bagfilter-type dust collector was selected as BACT for PM.

Permit 1803-AOP-R3 was issued to Georgia Pacific Oriented Strandboard Facility on July 8, 2004. This renewal made the following changes:

1. Reduced the required frequency of emissions testing for the Dryers and Press (SN-01 and SN-02) from once every year to once every five years based on past demonstrations of compliance,
2. Added the emissions associated with natural gas usage in the thermal oil system when the emissions are exhausted out of the bypass stacks (SN-01A),
3. Updated the HAP hourly and annual emission rates based on the most current AP-42 emission factors and stack testing results,
4. Added the CAM plan, and
5. Increased opacity limits from 5% to 10%.

Permit 1803-AOP-R3 was administratively amended on December 6, 2005. This amendment added the Specialty Saw/Sander Pneumatics to the Insignificant Activities list.

Permit 1803-AOP-R4 was issued on September 14, 2006. This minor modification allowed the facility to move the Overlay Project from the insignificant activities table into the Non-Stack Emissions Sources (SN-10). Increases from this modification were 0.8 tons per year of PM, 1.2 tons per year of VOC, 0.20 tons per year of acetaldehyde, 0.49 tons per year of formaldehyde, 0.10 tons per year of methanol, and 0.50 tons per year of vinyl acetate.

Permit 1803-AOP-R5 was issued on June 21, 2007. The modification included an increase of throughput on the Mat Reject/Flying Saw Pneumatics (SN-05); an increase of throughput on the Overlay Project included in the Uncontrolled Emission Sources (SN-10), and updated the insignificant activities list. This modification also allowed the facility to reduce CO emissions from SN-01, and required annual CO testing of both RTOs at SN-01 as required by LIS #06-127. CO emissions decreased by 262.8 tpy in this permit modification.

SECTION IV: SPECIFIC CONDITIONS

SN-01
Dryers

Source Description

This source consists of five flake dryers. Each dryer is a horizontal, cylindrical rotary drum heated by suspension-type burners and a pneumatic system which conveys the flakes through the dryers. The burners burn ground wood fuel from the hammermill. Each dryer has a maximum heat input of 40 million BTU per hour. BACT for this source has been determined to be a shared system of multiclones followed by two parallel regenerative thermal oxidizers (RTOs). These emissions are subject to the control requirements prescribed in 40 C.F.R. Part 63, Subpart DDDD, *National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Panels (PCWP)*.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #8, #12, #14, and #15, Plantwide Condition #7, and equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	94.1	412.2
VOC	159.5	698.8
CO	200.0	876.0
NO _x	73.3	321.1

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #8 and #15(a)(ii), Plantwide Condition #7, and equipment limitations. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
SO ₂	7.0	30.7

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3. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #8, #13, and #15(a)(ii), Plantwide Condition #7, and equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	94.10	412.20
Acetaldehyde	1.21	3.82
Formaldehyde	5.00	21.90
Methanol	0.84	2.85
Phenol	2.22	7.30
POM	0.001	0.0045

4. Visible emissions may not exceed (except as noted in Specific Condition #6) the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
01	10%	§18.501 of Regulation #18

5. The permittee shall conduct weekly observations of the opacity from SN-01 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observation, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. Visible emissions may not exceed the limits specified in the following table of this permit during off-line maintenance functions (i.e., the modified bakeout of the oxidizers) as measured by EPA Reference Method 9. [40 CFR Part 52, Subpart E]

SN	Limit	Regulatory Citation
01	20%	§19.503 of Regulation #19

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7. The permittee shall conduct daily observations of the opacity from SN-01 during off-line maintenance functions and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all the observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]
8. The RTOs shall have a maximum volumetric flow rate of 120% of the maximum air flow established during the compliance test. [Regulation 19, §19.303, §19.901 et seq. of Regulation #19, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
9. The permittee shall maintain continuous records which demonstrate compliance with Specific Condition #8. Readings will be recorded every 15 minutes and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq. of Regulation #19, and 40 CFR Part 52]
10. The permittee shall maintain continuous records of the static pressure at the inlet of each ID fan. Readings will be recorded hourly and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq. of Regulation #19, and 40 CFR Part 52, Subpart E]
11. The permittee shall maintain continuous records of when the isolation damper is in the open position. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq., and 40 CFR Part 52, Subpart E]
12. The permittee shall test one RTO in SN-01 every five years for PM₁₀, NO_x, and VOC [THC (as carbon)] emissions using EPA Reference Methods 5, 7E, and 25A respectively, and for opacity using EPA Reference Method #9. These tests shall be performed simultaneously. While performing the tests, the dryer shall be operating at least 90% of the maximum throughput rate. If testing is conducted at a rate lower than 90%, the facility shall be limited to an operating rate of 110% of the tested rate until compliance at a higher rate is demonstrated. The permittee shall submit a written testing protocol to the Compliance Section Manager at least 15 days prior to any scheduled test. [Regulation 19, §19.702, §19.901 et seq., and 40 CFR Part 52, Subpart E]
13. The permittee shall test one RTO in SN-01 every five years for Formaldehyde emissions using the Acetylacetone Method. While performing the test, the dryer shall be operating at least 90% of the maximum throughput rate. If testing is conducted at a rate lower than

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90%, the facility shall be limited to an operating rate of 110% of the tested rate until compliance at a higher rate is demonstrated. The permittee shall submit a written testing protocol to the Compliance Section Manager at least 15 days prior to any scheduled test. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

14. The permittee shall test both RTOs in SN-01 annually for CO emissions using EPA Reference Method 10. While performing the test, the dryer shall be operating at least 90% of the maximum throughput rate. If testing is conducted at a rate lower than 90%, the facility shall be limited to an operating rate of 110% of the tested rate until compliance at a higher rate is demonstrated. The permittee shall submit a written testing protocol to the Compliance Section Manager at least 15 days prior to any scheduled test. [Regulation 19, §19.702, §19.901 et seq., and 40 CFR Part 52, Subpart E]
15. SN-01 is subject to and shall comply with applicable provisions of 40 CFR Part 63, Subpart DDDD – *National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Panels*. Applicable provisions of Subpart DDDD include, but are not limited to, the following: [Regulation No. 19, §19.304 and 40 CFR §63.2232]
 - a. The permittee must use an emissions control system and demonstrate that the resulting emissions meet the compliance options and operating requirements in Tables 1B and 2 to this subpart.
 - i. The permittee must comply by using an emission control system (SN-01) to reduce emissions of total HAP, measured as THC (as carbon)^a, by 90 percent or the permittee must comply by using an emission control system that meets one of the compliance option included in Table 1B of 40 CFR Part 63 Subpart DDDD;
 - ii. The permittee shall maintain the 3-hour block average RTO firebox temperature for SN-01 above 1550 °F or the minimum temperature established during the performance test.
 - iii. The permittee shall collect and record the RTO firebox temperature at least every 15 minutes and reduce the data to 3-hour block averages to demonstrate compliance with Specific Condition #15(a)(ii). These records shall be kept onsite, updated daily, and made available to Department personnel upon request.
 - ^a You may choose to subtract methane from THC as carbon measurements [Regulation No. 19 §19.304 and 40 CFR §63.2240(b), §63.2262, §63.2269, §63.2270, §63.2271, Table 1B, Table 2, and Table 7]
 - b. The permittee must be in compliance with the compliance options, operating requirements, and the work practice requirements in this subpart at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption (RCDME) specified in §63.2251. The compliance options, operating requirements, and work practice requirements do not apply during times when the process unit(s) subject to the compliance options, operating

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requirements, and work practice requirements are not operating, or during periods of startup, shutdown, and malfunction. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events. [Regulation No. 19 §19.304 and 40 CFR §63.2250]

- c. The permittee must conduct performance test no later than 180 calendar days after the compliance date. The permittee must conduct each performance test according to the requirement in §63.7(e)(1), the requirements in paragraphs (b) through (o) of §63.2262, and according to the methods specified in Table 4 to this subpart.
 - i. The permittee must demonstrate a reduction in emissions of total HAP as THC using Method 25A over a 3-hour performance test for SN-01 (or other appropriate method specified in Table 4 of 40 CFR Part 63 Subpart DDDD) and record operating parameters listed in Specific Condition 15(a) and submit the results with the Notification of Compliance Status before the close of business on the 60th calendar day after completion of the performance test. The permittee shall submit notification of Performance Test required at least 60 calendar days prior to the initial or any subsequent performance test.
[Regulation No. 19 §19.304 and 40 CFR §63.2260, §63.2261(a), 63.2262, §63.2280(d)(2), §63.2280(c), §63.7(c), Table 2, Table 4, and Table 5]
- d. The permittee shall submit Semi-Annual Compliance Reports as outlined in §63.1417(f) no later than 30 days after each 180-day period. The first report shall be due July 31, 2008. Each report shall cover the previous 180-day period with exception of the initial report which shall cover the period between October 1, 2007 and June 30, 2008. The permittee shall report start-up, shutdown, and malfunction event handled consistent with the SSM Plan on the Semi-Annual Compliance Report. If applicable, reports of routine control device maintenance exemption activity shall be included with the Semi-Annual Compliance Report. [Regulation No. 19 §19.304 and 40 CFR §63.2281]
- e. The permittee shall submit reports of start-up, shutdown, and malfunction events inconsistent with SSM Plan. These events shall be reported on an immediate SSM report. [§60.10(d)(5)(ii)]
- f. If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A), as required by General Provision #7, and the compliance report includes all required information concerning deviations from any compliance option, operating requirement, or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. [Regulation No. 19 §19.304 and 40 CFR §63.2281(g)]

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- g. The permittee shall keep records required by §63.2282 in compliance with §63.2283. [Regulation No. 19 §19.304 and 40 CFR §63.2281(g)]

- h. The permittee must develop and implement a Startup, Shutdown, and Malfunction Plan (SSM) that covers each applicable emission limitation or work practice standard by the applicable Compliance due date. If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation No. 19 §19.304 and 40 CFR 63.6(e)(3)]

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SN-01A
Thermal Oil Heaters

Source Description

The Thermal Oil System (SN-01A) provides heat to the press section (SN-02) where the flakes are compressed to form the board. The thermal oil system that is used to heat the press to the appropriate temperature consists of two wood-fueled, suspension type burners, rated at 40 MMBTU/hr each. Exhaust from these burners is routed through the regenerative thermal oxidizer (SN-01) under normal operating conditions.

However, there are two 30 MMBTU/hr natural gas-fired burners included in the thermal oil system for back-up purposes. These back-up burners would be used to keep the oil within the system warm when the plant is down or in the event the RTOs show signs of back-pressuring due to expected gradual media deterioration within the RTO. Emissions associated with the combustion of natural gas used to power the back-up burners are vented to the atmosphere when in use.

This source quantifies the emissions from the natural gas combustion vented to the atmosphere. Compliance will be shown by using only natural gas when venting directly to the atmosphere.

Specific Conditions

16. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #19 and equipment limitations. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	0.3	1.0
SO ₂	0.1	0.1
VOC	0.2	0.8
CO	3.1	13.3
NO _x	3.0	13.2

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17. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #19 and equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.3	1.0

18. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance with this condition is burning only natural gas whenever venting to the atmosphere. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
01A	10%	§18.501 of Regulation #18

19. When venting to the atmosphere, only natural gas may be used as fuel in the Thermal Oil Heaters. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]
20. The permittee shall maintain records of when the Thermal Oil Heaters are vented to the atmosphere and when natural gas was the fuel burned. These records shall be kept on site, updated monthly, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq. and 40 CFR Part 52, Subpart E]

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SN-02
Press

Source Description

In the press, dried wood flakes are blended with resin and wax, and are then placed as a mat on the forming line in layers, oriented at right angles, to provide structural integrity. The mat is then moved into the thermal-oil-heated press, where it is compressed and heated to bond the resin to the flakes. The thermal oil is heated to the appropriate temperature in a separate system, consisting of two, wood fuel, suspension-type burners. The exhaust gases from the burners are routed through the dryer system. Air pollutant emissions associated with the board press operation include PM, VOCs, CO, NO_x and formaldehyde. BACT and MACT for this source have been determined to be a shared system of multiclones followed by a Thermal Catalytic Oxidizer (TCO)/Regenerative Thermal Oxidizer. These emissions are subject to the control requirements prescribed in 40 C.F.R. Part 63, Subpart DDDD, *National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Panels (PCWP)*.

Specific Conditions

21. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #27, #31, #33, Plantwide Condition #7, and equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	3.5	15.5
VOC	25.3	110.7
CO	9.2	40.4
NO _x	13.5	59.2

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22. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #27, #31, #32, #33, Plantwide Condition #7, and equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	3.5	15.5
Acetaldehyde	0.06	0.24
Formaldehyde	1.00	4.40
Methanol	5.14	22.50
Phenol	0.74	3.24

23. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
02	10%	§18.501

24. The permittee shall conduct weekly observations of the opacity from source SN-02 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

25. Visible emissions may not exceed the limits specified in the following table of this permit during off-line maintenance functions (i.e., the modified bakeout of the oxidizers) as measured by EPA Reference Method 9. [40 CFR Part 52, Subpart E]

SN	Limit	Regulatory Citation
02	20%	§19.503

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26. The permittee shall conduct daily observations of the opacity from SN-02 during off-line maintenance functions and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]
27. The TCO/RTO shall have a maximum volumetric flow rate of 120% of the maximum air flow established during the compliance test. [Regulation 19, §19.303, §19.901 et seq., 40 CFR Part 52, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
28. The permittee shall maintain continuous records which demonstrate compliance with Specific Condition #27. Readings will be recorded every 15 minutes and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq., and 40 CFR Part 52, Subpart E]
29. The permittee shall maintain continuous records of the static pressure at the inlet of each ID fan. Readings will be recorded hourly and averaged every 12 hours. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq., and 40 CFR Part 52, Subpart E]
30. The permittee shall maintain continuous records of when the isolation damper is in the open position. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [Regulation 19, §19.705, §19.901 et seq., and 40 CFR Part 52, Subpart E]
31. The permittee shall test SN-02 either in TCO or RTO mode every five years for PM₁₀, NO_x, CO, and VOC emissions using EPA Reference Methods 5, 7E, 10, and 25A respectively, and for opacity using EPA Reference Method 9. These tests shall be performed simultaneously. While performing the tests, the press shall be operating at least 90% of the maximum throughput rate. If testing is conducted at a rate lower than 90%, the facility shall be limited to an operating rate of 110% of the tested rate until compliance at a higher rate is demonstrated. The permittee shall submit a written testing protocol to the Compliance Section Manager at least 15 days prior to any scheduled test. [Regulation 19, §19.702, §19.901 et seq., and 40 CFR Part 52, Subpart E]
32. The permittee shall test SN-02 either in TCO or RTO mode every five years for Formaldehyde emissions using the Acetylacetone Method. While performing the test, the press shall be operating at least 90% of the maximum throughput rate. If testing is conducted at a rate lower than 90%, the facility shall be limited to an operating rate of

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110% of the tested rate until compliance at a higher rate is demonstrated. The permittee shall submit a written testing protocol to the Compliance Section Manager at least 15 days prior to any scheduled test. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

33. SN-02 is subject to and shall comply with applicable provisions of 40 CFR Part 63, Subpart DDDD – *National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Panels*. Applicable provisions of Subpart DDDD include, but are not limited to, the following: [Regulation No. 19 §19.304 and 40 CFR §63.2232]
- a. The permittee must use an emissions control system and demonstrate that the resulting emissions meet the compliance options and operating requirements in Tables 1B and 2 to this subpart.
 - i. The permittee must comply by using an emission control system (SN-02) to reduce emissions of total HAP, measured as THC (as carbon)^a, by 90 percent or the permittee must comply by using an emission control system that meets one of the compliance options included in Table 1B of 40 CFR Part 63 Subpart DDDD;
 - ii. When operated as a TCO, the permittee shall maintain the 3-hour block average catalytic oxidizer temperature for SN-02 above 800 °F or above the minimum temperature established during the performance test; and the permittee shall check the activity level of a representative sample of the catalyst at least every 12 months. When operated as RTO, the permittee shall maintain the 3-hour block average RTO firebox temperature for SN-02 above 1505 °F or above the minimum temperature established during the performance test;
 - iii. The permittee shall collect and record the TCO/RTO temperature of SN-02 at least every 15 minutes and reduce the data to 3-hour block averages to demonstrate compliance with Specific Condition #33(a)(ii). These records shall be kept onsite, updated daily, and made available to Department personnel upon request.
 - ^a You may choose to subtract methane from THC as carbon measurements [Regulation No. 19 §19.304 and 40 CFR §63.2240(b), §63.2262, §63.2269, §63.2270, §63.2271, Table 1B, Table 2, and Table 7]
 - b. The permittee must conduct performance test no later than 180 calendar days after the compliance date. The permittee must conduct each performance test according to the requirement in §63.7(e)(1), the requirements in paragraphs (b) through (o) of §63.2262, and according to the methods specified in Table 4 to this subpart.
 - i. The permittee must demonstrate a reduction in emissions of total HAP as THC using Method 25A over a 3-hour performance test for SN-02 (or other appropriate method specified in Table 4 of 40 CFR Part 63 Subpart DDDD) and record operating parameters

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listed in Specific Condition 33(a) and submit the results with the Notification of Compliance Status before the close of business on the 60th calendar day after completion of the performance test. The permittee shall submit notification of Performance Test required at least 60 calendar days prior to the initial or any subsequent performance test.

[Regulation No. 19 §19.304 and 40 CFR §63.2260, §63.2261(a), 63.2262, §63.2280(d)(2), §63.2280(c), §63.7(c), Table 2, Table 4, and Table 5]

- c. The permittee must be in compliance with the compliance options, operating requirements, and the work practice requirements in this subpart at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption (RCDME) specified in §63.2251. The compliance options, operating requirements, and work practice requirements do not apply during times when the process unit(s) subject to the compliance options, operating requirements, and work practice requirements are not operating, or during periods of startup, shutdown, and malfunction. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events. [Regulation No. 19 §19.304 and 40 CFR §63.2250]
- d. The permittee shall operate the press with an enclosure that meets the design specifications in §63.2292 or measure the capture efficiency of the capture device for the press or board cooler using Methods 204 and 204A through 204F of 40 CFR part 51, appendix M (as appropriate), or using the alternative tracer gas method contained in appendix A to this subpart. The permittee must submit documentation that the wood products enclosure meets the press enclosure design criteria in §63.2292 or the results of the capture efficiency verification with the Notification of Compliance Status. [Regulation No. 19 §19.304 and 40 CFR §63.2262(h), §63.2267, §63.2292, and Table 4]
- e. The permittee shall submit Semi-Annual Compliance Reports as outlined in §63.1417(f) no later than 30 days after each 180-day period. The first report shall be due July 31, 2008. Each report shall cover the previous 180-day period with exception of the initial report which shall cover the period between October 1, 2007 and June 30, 2008. The permittee shall report start-up, shutdown, and malfunction event handled consistent with the SSM Plan on the Semi-Annual Compliance Report. If applicable, reports of routine control device maintenance exemption activity shall be included with the Semi-Annual Compliance Report. [Regulation No. 19 §19.304 and 40 CFR §63.2281]
- f. The permittee shall submit reports of start-up, shutdown, and malfunction events inconsistent with SSM Plan. These events shall be reported on an immediate SSM report. [§60.10(d)(5)(ii)]

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- g. If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A), as required by General Provision #7, and the compliance report includes all required information concerning deviations from any compliance option, operating requirement, or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. [Regulation No. 19 §19.304 and 40 CFR §63.2281(g)]
- h. The permittee shall keep records required by §63.2282 in compliance with §63.2283. [Regulation No. 19 §19.304 and 40 CFR §63.2281(g)]
- i. The permittee must develop and implement a Startup, Shutdown, and Malfunction Plan (SSM) that covers each applicable emission limitation or work practice standard by October 1, 2007. If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation No. 19 §19.304 and 40 CFR 63.6(e)(3)]

SN-03
Screen Fines/Saw Trim Transfer Pneumatics

Source Description

The pressed mats are cut to size, cooled, and the edges are sprayed with sealant to prevent swelling. Dry end material is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.901 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	2.7	11.6
VOC	7.8	34.2

35. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	2.7	11.6
Methanol	0.06	0.27

36. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
03	10%	§18.501 of Regulation #18

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37. The permittee shall conduct weekly observations of the opacity from source SN-03 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-04
Saw Trim/Finishing Line Pneumatics

Source Description

The pressed mats are cut to size, cooled, and the edges are sprayed with sealant to prevent swelling. Dry end material is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations.

Specific Conditions

38. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	2.1	9.0

39. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	2.1	9.0

40. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
04	10%	§18.501

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41. The permittee shall conduct weekly observations of the opacity from source SN-04 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.
[Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-05
Mat Reject/Flying Saw Pneumatics

Source Description

The pressed mats are cut to size, cooled, and the edges are sprayed with sealant to prevent swelling. Dry end material is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations.

Specific Conditions

42. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	3.8	16.3

43. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	3.8	16.3

44. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
05	10%	§18.501

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45. The permittee shall conduct weekly observations of the opacity from source SN-05 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.
[Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-06
Specialty Saw/Sander Pneumatics

Source Description

The pressed mats are cut to size, cooled, and the edges are sprayed with sealant to prevent swelling. Dry end material is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations.

Specific Conditions

46. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	1.3	5.7
VOC	4.2	18.0

47. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.3	5.7
Formaldehyde	0.03	0.11
Methanol	0.13	0.54

48. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
06	10%	§18.801

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49. The permittee shall conduct weekly observations of the opacity from source SN-06 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.
[Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-07
Fuel System Pneumatics

Source Description

The pressed mats are cut to size, cooled, and the edges are sprayed with sealant to prevent swelling. Dry end material is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations.

Specific Conditions

50. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	0.5	1.9
VOC	4.2	18.0

51. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.5	1.9
Formaldehyde	0.03	0.11
Methanol	0.13	0.54

52. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
07	10%	18.501

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53. The permittee shall conduct weekly observations of the opacity from source SN-07 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.
[Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-08
Forming Bins Pneumatics

Source Description

The pressed mats are cut to size, cooled, and the edges are sprayed with sealant to prevent swelling. Dry end material is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations.

Specific Conditions

54. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	1.2	5.3
VOC	8.9	39.0

55. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.2	5.3
Formaldehyde	0.25	1.08
Methanol	4.32	18.90

56. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
08	10%	18.501

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57. The permittee shall conduct weekly observations of the opacity from source SN-08 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.
[Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-09
Hammermill System Pneumatics

Source Description

The pressed mats are cut to size, cooled, and the edges are sprayed with sealant to prevent swelling. Dry end material is either burned to heat the dryers and thermal oil system or shipped off-site for use as wood fuel or as furnish in other wood products manufacturing operations.

Specific Conditions

58. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	2.7	11.6

59. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	2.7	11.6

60. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
09	10%	§18.501

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61. The permittee shall conduct weekly observations of the opacity from source SN-09 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.
[Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-10
Non-Stack Emission Sources

Source Description

The material handling operations responsible for non-stack emissions include Debarker (PM), Bark Hog (PM), Blend House (VOC/Formaldehyde), Finished Product Storage (VOC/Formaldehyde), Edge Sealing of boards outside Spray Booth (PM), Resin Storage Tanks (VOC/Formaldehyde), Paved Roads (PM), Unpaved Roads (PM), Outside Bark Storage Area (PM), and Overlay Application Process (VOC/HAPS).

Specific Conditions

62. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	31.9	68.6
VOC	1.4	2.0

63. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	103.9	266.3
Acetaldehyde****	0.56	2.5
Formaldehyde****	0.33	1.5
Methanol****	0.33	1.5
Vinyl Acetate****	0.56	2.5

*****The overlay application process included within SN-10 must use materials (i.e., adhesives) that meet both a VOC limit and a HAP limit. The HAP content of the adhesive utilized in the process may vary within permitted limits, but the adhesive must also meet the overall VOC emission limit. Refer to Specific Condition 67 for VOC and HAP content limits for adhesive material used in the overlay application process.*

64. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [40 CFR Part 52, Subpart E]

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SN	Limit	Regulatory Citation
10	20%	§19.503

65. The permittee shall conduct weekly observations of the opacity from the debarker and bark hog within SN-10 and keep a record of these observations. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions comply with the permitted opacity following the corrective action. The permittee shall maintain records of all observations, the cause of any visible emissions in excess of the permitted opacity and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]
66. The Overlay Application Process Unit within SN-10 is subject to and shall comply with applicable provisions of 40 CFR Part 63, Subpart QQQQ – *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products*. Applicable provisions of Subpart QQQQ include, but are not limited to, the following: [Regulation No. 19 §19.304 and 40 CFR §63.4681]
- a. The permittee may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The permittee must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limit in §63.4690 and must use no thinner or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §63.4692 and §63.4693, respectively. [40 CFR §63.4741]
 - b. The permittee shall comply with the following emission limits that apply to the Overlay Application Process as required by 40 CFR §63.4690. The permittee must limit organic HAP emissions to the atmosphere to no more than the applicable emission limit(s) in the following table, determined according to the requirements in §63.4741, §63.4751, or §63.4761. [Regulation 18, §18.801 and 40 CFR Part 63 Subpart QQQQ Table 2]

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If the affected source applies coating to products in the following subcategory. .	Then, the organic HAP emission limit for the affected source, in grams HAP/liter solids (lb HAP/gal solids)^{1,2}is:
1. Exterior siding and primed doorskins	7 (0.06)
2. Flooring	93 (0.78)
3. Interior wall paneling or tileboard	183 (1.53)
4. Other interior panels	20 (0.17)
5. Doors, windows, and miscellaneous	231 (1.93)

¹Determined as a rolling 12-month emission rate according to the requirements in §63.4741, §63.4751, or §63.4761, as applicable.

²If the affected source applies coatings to products in more than one of the subcategories listed in the table, then you must determine the applicable emission limit according to §63.4690(c).

- c. The permittee must maintain records as specified in §63.4730 and §63.4731. [40 CFR §63.4742 and 40 CFR §63.4752]

67. The permittee shall not exceed the following content limits of VOC or HAPs of adhesive material used in overlay application process at SN-10. [Regulation 18, §18.801, Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant****	Content Limit (weight percent)
VOC	0.22
Acetaldehyde	0.11
Formaldehyde	0.03
Methanol	0.07
Vinyl Acetate	0.11

****The overlay application process included within SN-10 must use materials (i.e., adhesives) that meet both a VOC limit and a HAP limit. The HAP content of the adhesive utilized in the process may vary within permitted limits, but the adhesive must also meet the overall VOC emission limit. Refer to Specific Condition 67 for VOC and HAP content limits for adhesive material used in the overlay application process.

68. The permittee shall maintain records which demonstrate compliance with Specific Condition #67. The permittee will maintain a twelve month rolling total and each individual month's data on-site and made available to Department personnel upon request. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-11: Stencil / Marking / Logo Application

Stencils, markings and logos may be applied to the board. Volatile organic emissions release into the general plant environment and do not directly vent to the atmosphere through a stack. These ink/paint applications are considered Group 1 miscellaneous coating operations under the Plywood and Composite Wood Panels (PCWP) MACT, 40 CFR 63 Subpart DDDD and are subject to applicable work practice requirements. Miscellaneous coating operations that are not Group 1 miscellaneous coating operations may take place at the facility, but are not subject to the following work practice requirements or Specific Conditions.

Specific Conditions

69. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these limits shall be demonstrated by compliance with Specific Condition 71. [Regulation No. 19 §19.501 *et seq.* effective October 15, 2007, and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	Tpy
VOC	3.2	4.7

70. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these limits shall be demonstrated by compliance with Specific Condition 73. [Regulation No. 18 §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	Tpy
HAPs	0.87	1.28

71. The permittee shall not emit more than 4.7 tons of VOC at SN-11 per consecutive 12 month period. VOC content of the Paint/Ink used shall be no more than 0.31 lb VOC/gal. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
72. The permittee will calculate and maintain monthly records to demonstrate compliance with Specific Condition No. 71. The permittee will maintain a twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]
73. The permittee shall use only non-HAP coatings at this source. Non-HAP coating is defined as a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0 percent by mass for other HAP compounds. [Regulation No. 19 §19.304 and 40 CFR §63.2241]
74. The permittee shall maintain records which demonstrate compliance with Specific Condition 73. These records shall be kept on site, and shall be made available to Department

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personnel upon request. [Regulation No. 19 §19.702 and §19.901 *et seq.* and 40 CFR Part 52.21, Subpart E]

75. The permittee must meet the notification requirements according to the schedule in 40 CFR §63.2280 and according to 40 CFR Part 63, subpart A. [Regulation No. 19 §19.304 and 40 CFR §63.2280]

76. The permittee shall report each deviation to the work practice requirement to use only non-HAP coatings as specified in Specific Condition 73. These deviations shall be reported in accordance with §63.2281. If there are no deviations from the non-HAP coating requirements, the permittee shall submit a statement that there were no deviations from the work practice requirements during the reporting period. [Regulation No. 19 §19.304 and 40 CFR §63.2271]

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Georgia-Pacific Wood Products, LLC Fordyce OSB Oriented Strandboard Facility will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or §18.1002 of Regulation #18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment.
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation #26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
7. The permittee shall not produce in excess of 600 million square feet of OSB, on a 3/8-inch basis, during any consecutive 12-month period. [Regulation 19, §19.901 et seq. and 40 CFR Part 52, Subpart E]

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8. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Plantwide Condition #7. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Provision #7. [Regulation 19, §19.705, §19.901 et seq., and 40 CFR Part 52, Subpart E]

Routine Control Device Maintenance for the Dryer RTOs and the Press RTO/TCO

9. The permittee shall conduct routine maintenance on the control device during operations only in the following scenarios:
 - a. Maintenance can be performed on either one of the Dryer RTOs and the Press RTO/TCO at the same time for a period of any 4 hours between the hours of 8 a.m. and 4 p.m., during which time the other Dryer RTO shall operate normally to control emissions from three of five dryers, one dryer must be shutdown, and the remaining fifth dryer may be exhausted without emissions controls;
 - b. Maintenance on the Press RTO/TCO can be performed for any length of time between the hours of 2 a.m. and 10 p.m. with both Dryer RTOs operating normally.[Regulation 19, §19.502, and 40 CFR Part 52, Subpart E]
10. Downtime of the control devices during Routine Control Device Maintenance when the dryers and press are in operation shall not be more than total of 150 hours for all Dryer RTOs (SN-01) and shall not be more than total 43.8 hours for all the Press RTO/TCO (SN-02) for any consecutive 12-month period. [§19.901 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]
11. The permittee shall maintain records which demonstrate compliance with Plantwide Conditions #9 and 10. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Provision #7. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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12. The permittee shall not exceed the emission rates set forth in the following table during Routine Control Device Maintenance. [Regulation 19, §19.301, §19.502, §19.901 et seq., Regulation 18, , §18.801, and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy		
01	Dryers	PM ₁₀	188.2	14.1		
		PM	188.2	14.1		
		VOC	319	23.9		
		CO	67.0	5.0		
		Formaldehyde	10.0	0.75		
		Acetaldehyde	2.4	0.18		
		Methanol	1.7	0.13		
		Phenol	4.4	0.33		
		POM	0.002	0.0002		
		Acrolein	2.0	0.15		
		Benzene	0.18	0.013		
		Cumene	1.5	0.12		
		Methyl Isobutyl Ketone	0.23	0.017		
		Propionaldehyde	0.27	0.02		
		Toluene	0.27	0.02		
		02	Press	PM	14	0.31
				PM ₁₀	14	0.31
VOC	253			5.54		
CO	37			0.81		
Formaldehyde	10			0.22		
Acetaldehyde	0.6			0.01		
Methanol	51.4			1.13		
Phenol	7.4			0.16		

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Title VI Provisions

13. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]
 - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

14. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC like appliance” as defined at §82.152.)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

15. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

16. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

17. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

Permit Shield

18. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated October 2, 2007.

Applicable Regulations

Source No.	Regulation	Description
Facility	Regulation #19	Regulations of the Arkansas Plan of Implementation for Air Pollution Control
Facility	Regulation #26	Regulations of the Arkansas Operations Air Permit Program
SN-01, SN-02, and SN-11	40 CFR Part 63, Subpart DDDD	National Emissions Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products
SN-10	40 CFR Part 63, Subpart QQQQ	National Emissions Standards for Hazardous Air Pollutants for Surface Coating of Wood Building Products

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated October 2, 2007.

Inapplicable Regulations

Source No.	Regulation	Description
SN-01	40 CFR Part 60, Subpart Db	In a memorandum dated November 19, 1992, the US EPA concluded that NSPS Subparts Db and Dc do not apply to process dryers.
SN-01	40 CFR Part 60, Subpart Dc	In a memorandum dated November 19, 1992, the US EPA concluded that NSPS Subparts Db and Dc do not apply to process dryers.

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SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation #26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated October 2, 2007.

Description	Category
Portable Heaters	A-1
Used Oil Tank	A-2
Coolant Tank	A-2
Fire Pump Diesel Tank	A-3
Diesel Fueling Tank	A-3
Emergency Generator Diesel Tank	A-3
Gasoline Fueling Tank	A-3
Thermal Oil Tank	A-3
Kerosene Tank	A-3
Maintenance Welding and Cutting	A-7
Emergency Generator	A-13

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26)]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit.
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.[40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and

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maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below:

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
5301 Northshore Drive
North Little Rock, AR 72118-5317

[40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
- a. For all upset conditions (as defined in Regulation 19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
- i. The facility name and location;
 - ii. The process unit or emission source deviating from the permit limit;
 - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
 - iv. The date and time the deviation started;
 - v. The duration of the deviation;
 - vi. The average emissions during the deviation;
 - vii. The probable cause of such deviations;
 - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
 - ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other

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means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

- b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]
14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]

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15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]
17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]
18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]
20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
 - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]

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- a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
 - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:
 - a. Such an extension does not violate a federal requirement;
 - b. The permittee demonstrates the need for the extension; and
 - c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:
 - a. Such a request does not violate a federal requirement;
 - b. Such a request is temporary in nature;

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- c. Such a request will not result in a condition of air pollution;
- d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
- e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
- f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:

- a. The request does not violate a federal requirement;
- b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
- c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

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APPENDIX A

40 C.F.R. Part 63, Subpart DDDD, *National Emission Standards for Hazardous Air Pollutants
for Plywood and Composite Wood Panels*

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e-CFR Data is current as of December 3, 2007

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

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Subpart DDDD—National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

What This Subpart Covers

Source: 69 FR 46011, July 30, 2004, unless otherwise noted.

§ 63.2230 What is the purpose of this subpart?

This subpart establishes national compliance options, operating requirements, and work practice requirements for hazardous air pollutants (HAP) emitted from plywood and composite wood products (PCWP) manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the compliance options, operating requirements, and work practice requirements.

§ 63.2231 Does this subpart apply to me?

This subpart applies to you if you meet the criteria in paragraphs (a) and (b) of this section.

(a) You own or operate a PCWP manufacturing facility. A PCWP manufacturing facility is a facility that manufactures plywood and/or composite wood products by bonding wood material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a structural panel or engineered wood product. Plywood and composite wood products manufacturing facilities also include facilities that manufacture dry veneer and lumber kilns located at any facility. Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, oriented strandboard, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, kiln-dried lumber, and glue-laminated beams.

(b) The PCWP manufacturing facility is located at a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

§ 63.2232 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source at a PCWP manufacturing facility.

(b) The affected source is the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations (including any combustion unit exhaust stream routinely used to direct fire process unit(s)), resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other national emission standards for hazardous air pollutants (NESHAP)). The affected source also includes onsite storage and preparation of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing, and miscellaneous coating operations (§63.2292). The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.

(c) An affected source is a new affected source if you commenced construction of the affected source after January 9, 2003, and

you meet the applicability criteria at the time you commenced construction.

(d) An affected source is reconstructed if you meet the criteria as defined in §63.2.

(e) An affected source is existing if it is not new or reconstructed.

[69 FR 46011, July 30, 2004, as amended at 71 FR 8371, Feb. 16, 2006]

§ 63.2233 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraph (a)(1) or (2) of this section, whichever is applicable.

(1) If the initial startup of your affected source is before September 28, 2004, then you must comply with the compliance options, operating requirements, and work practice requirements for new and reconstructed sources in this subpart no later than September 28, 2004.

(2) If the initial startup of your affected source is after September 28, 2004, then you must comply with the compliance options, operating requirements, and work practice requirements for new and reconstructed sources in this subpart upon initial startup of your affected source.

(b) If you have an existing affected source, you must comply with the compliance options, operating requirements, and work practice requirements for existing sources no later than October 1, 2007.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, you must be in compliance with this subpart by October 1, 2007 or upon initial startup of your affected source as a major source, whichever is later.

(d) You must meet the notification requirements according to the schedule in §63.2280 and according to 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with the compliance options, operating requirements, and work practice requirements in this subpart.

[69 FR 46011, July 30, 2004, as amended at 71 FR 8372, Feb. 16, 2006; 72 FR 61062, Oct. 29, 2007]

Compliance Options, Operating Requirements, and Work Practice Requirements

§ 63.2240 What are the compliance options and operating requirements and how must I meet them?

You must meet the compliance options and operating requirements described in Tables 1A, 1B, and 2 to this subpart and in paragraph (c) of this section by using one or more of the compliance options listed in paragraphs (a), (b), and (c) of this section. The process units subject to the compliance options are listed in Tables 1A and 1B to this subpart and are defined in §63.2292. You need only to meet one of the compliance options outlined in paragraphs (a) through (c) of this section for each process unit. You cannot combine compliance options in paragraph (a), (b), or (c) for a single process unit. (For example, you cannot use a production-based compliance option in paragraph (a) for one vent of a veneer dryer and an add-on control system compliance option in paragraph (b) for another vent on the same veneer dryer. You must use either the production-based compliance option or an add-on control system compliance option for the entire dryer.)

(a) *Production-based compliance options.* You must meet the production-based total HAP compliance options in Table 1A to this subpart and the applicable operating requirements in Table 2 to this subpart. You may not use an add-on control system or wet control device to meet the production-based compliance options.

(b) *Compliance options for add-on control systems.* You must use an emissions control system and demonstrate that the resulting emissions meet the compliance options and operating requirements in Tables 1B and 2 to this subpart. If you own or operate a reconstituted wood product press at a new or existing affected source or a reconstituted wood product board cooler at a new affected source, and you choose to comply with one of the concentration-based compliance options for a control system outlet (presented as option numbers 2, 4, and 6 in Table 1B to this subpart), you must have a capture device that either meets the definition of wood products enclosure in §63.2292 or achieves a capture efficiency of greater than or equal to 95 percent.

(c) *Emissions averaging compliance option (for existing sources only).* Using the procedures in paragraphs (c)(1) through (3) of this section, you must demonstrate that emissions included in the emissions average meet the compliance options and operating requirements. New sources may not use emissions averaging to comply with this subpart.

(1) *Calculation of required and actual mass removal.* Limit emissions of total HAP, as defined in §63.2292, to include acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde from your affected source to the standard specified by Equations 1, 2, and 3 of this section.

$$RMR = 0.90 \times \left(\sum_{i=1}^n UCEP_i \times OH_i \right) \quad (Eq. 1)$$

$$AMR = \left(\sum_{i=1}^n CD_i \times OCEP_i \times OH_i \right) \quad (Eq. 2)$$

$$AMR \geq RMR \quad (Eq. 3)$$

Where:

RMR = required mass removal of total HAP from all process units generating debits (*i.e.*, all process units that are subject to the compliance options in Tables 1A and 1B to this subpart and that are either uncontrolled or under-controlled), pounds per semiannual period;

AMR = actual mass removal of total HAP from all process units generating credits (*i.e.*, all process units that are controlled as part of the Emissions Averaging Plan including credits from debit-generating process units that are under-controlled), pounds per semiannual period;

UCEP_i = mass of total HAP from an uncontrolled or under-controlled process unit (i) that generates debits, pounds per hour;

OH_i = number of hours a process unit (i) is operated during the semiannual period, hours per 6-month period;

CD_i = control system efficiency for the emission point (i) for total HAP, expressed as a fraction, and not to exceed 90 percent, unitless (Note: To calculate the control system efficiency of biological treatment units that do not meet the definition of biofilter in §63.2292, you must use 40 CFR part 63, appendix C, Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit.);

OCEP_i = mass of total HAP from a process unit (i) that generates credits (including credits from debit-generating process units that are under-controlled), pounds per hour;

0.90 = required control system efficiency of 90 percent multiplied, unitless.

(2) *Requirements for debits and credits.* You must calculate debits and credits as specified in paragraphs (c)(2)(i) through (vi) of this section.

(i) You must limit process units in the emissions average to those process units located at the existing affected source as defined in §63.2292.

(ii) You cannot use nonoperating process units to generate emissions averaging credits. You cannot use process units that are shut down to generate emissions averaging debits or credits.

(iii) You may not include in your emissions average process units controlled to comply with a State, Tribal, or Federal rule other than this subpart.

(iv) You must use actual measurements of total HAP emissions from process units to calculate your required mass removal (RMR) and actual mass removal (AMR). The total HAP measurements must be obtained according to §63.2262(b) through (d), (g), and (h), using the methods specified in Table 4 to this subpart.

(v) Your initial demonstration that the credit-generating process units will be capable of generating enough credits to offset the debits from the debit-generating process units must be made under representative operating conditions. After the compliance date, you must use actual operating data for all debit and credit calculations.

(vi) Do not include emissions from the following time periods in your emissions averaging calculations:

(A) Emissions during periods of startup, shutdown, and malfunction as described in the startup, shutdown, and malfunction plan (SSMP).

(B) Emissions during periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities or during periods of control device maintenance covered in your routine control device maintenance exemption. No credits may be assigned to credit-generating process units, and maximum debits must be assigned to debit-generating process units during these periods.

(3) *Operating requirements.* You must meet the operating requirements in Table 2 to this subpart for each process unit or control device used in calculation of emissions averaging credits.

§ 63.2241 What are the work practice requirements and how must I meet them?

(a) You must meet each work practice requirement in Table 3 to this subpart that applies to you.

(b) As provided in §63.6(g), we, the EPA, may choose to grant you permission to use an alternative to the work practice requirements in this section.

(c) If you have a dry rotary dryer, you may choose to designate your dry rotary dryer as a green rotary dryer and meet the more stringent compliance options and operating requirements in §63.2240 for green rotary dryers instead of the work practices for dry rotary dryers. If you have a hardwood veneer dryer or veneer redryer, you may choose to designate your hardwood veneer dryer or veneer redryer as a softwood veneer dryer and meet the more stringent compliance options and operating requirements in §63.2240 for softwood veneer dryer heated zones instead of the work practices for hardwood veneer dryers or veneer redryers.

General Compliance Requirements

§ 63.2250 What are the general requirements?

(a) You must be in compliance with the compliance options, operating requirements, and the work practice requirements in this subpart at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption specified in §63.2251. The compliance options, operating requirements, and work practice requirements do not apply during times when the process unit(s) subject to the compliance options, operating requirements, and work practice requirements are not operating, or during periods of startup, shutdown, and malfunction. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You must develop a written SSMP according to the provisions in §63.6(e)(3).

(d) Shutoff of direct-fired burners resulting from partial and full production stoppages of direct-fired softwood veneer dryers or over-temperature events shall be deemed shutdowns and not malfunctions. Lighting or re-lighting any one or all gas burners in direct-fired softwood veneer dryers shall be deemed startups and not malfunctions.

[69 FR 46011, July 30, 2004, as amended at 71 FR 8372, Feb. 16, 2006; 71 FR 20463, Apr. 20, 2006]

§ 63.2251 What are the requirements for the routine control device maintenance exemption?

(a) You may request a routine control device maintenance exemption from the EPA Administrator for routine maintenance events such as control device bakeouts, washouts, media replacement, and replacement of corroded parts. Your request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during process shutdowns, describe how you plan to make reasonable efforts to minimize emissions during the maintenance, and provide any other documentation required by the EPA Administrator.

(b) The routine control device maintenance exemption must not exceed the percentages of process unit operating uptime in paragraphs (b)(1) and (2) of this section.

(1) If the control device is used to control a green rotary dryer, tube dryer, rotary strand dryer, or pressurized refiner, then the routine control device maintenance exemption must not exceed 3 percent of annual operating uptime for each process unit controlled.

(2) If the control device is used to control a softwood veneer dryer, reconstituted wood product press, reconstituted wood product board cooler, hardboard oven, press predryer, conveyor strand dryer, or fiberboard mat dryer, then the routine control device maintenance exemption must not exceed 0.5 percent of annual operating uptime for each process unit controlled.

(3) If the control device is used to control a combination of equipment listed in both paragraphs (b)(1) and (2) of this section, such as a tube dryer and a reconstituted wood product press, then the routine control device maintenance exemption must not exceed 3 percent of annual operating uptime for each process unit controlled.

(c) The request for the routine control device maintenance exemption, if approved by the EPA Administrator, must be IBR in and attached to the affected source's title V permit.

(d) The compliance options and operating requirements do not apply during times when control device maintenance covered under your approved routine control device maintenance exemption is performed. You must minimize emissions to the greatest extent possible during these routine control device maintenance periods.

(e) To the extent practical, startup and shutdown of emission control systems must be scheduled during times when process equipment is also shut down.

§ 63.2252 What are the requirements for process units that have no control or work practice requirements?

For process units not subject to the compliance options or work practice requirements specified in §63.2240 (including, but not limited to, lumber kilns), you are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this subpart, or any other requirements in subpart A of this part, except for the initial notification requirements in §63.9(b).

[71 FR 8372, Feb. 16, 2006]

Initial Compliance Requirements

§ 63.2260 How do I demonstrate initial compliance with the compliance options, operating requirements, and work practice requirements?

(a) To demonstrate initial compliance with the compliance options and operating requirements, you must conduct performance tests and establish each site-specific operating requirement in Table 2 to this subpart according to the requirements in §63.2262 and Table 4 to this subpart. Combustion units that accept process exhausts into the flame zone are exempt from the initial performance testing and operating requirements for thermal oxidizers.

(b) You must demonstrate initial compliance with each compliance option, operating requirement, and work practice requirement that applies to you according to Tables 5 and 6 to this subpart and according to §§63.2260 through 63.2269 of this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.2280(d).

§ 63.2261 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct performance tests upon initial startup or no later than 180 calendar days after the compliance date that is specified for your source in §63.2233 and according to §63.7(a)(2), whichever is later.

(b) You must conduct initial compliance demonstrations that do not require performance tests upon initial startup or no later than 30 calendar days after the compliance date that is specified for your source in §63.2233, whichever is later.

§ 63.2262 How do I conduct performance tests and establish operating requirements?

(a) You must conduct each performance test according to the requirements in §63.7(e)(1), the requirements in paragraphs (b) through (o) of this section, and according to the methods specified in Table 4 to this subpart.

(b) *Periods when performance tests must be conducted.* (1) You must not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(2) You must test under representative operating conditions as defined in §63.2292. You must describe representative operating conditions in your performance test report for the process and control systems and explain why they are representative.

(c) *Number of test runs.* You must conduct three separate test runs for each performance test required in this section as specified in §63.7(e)(3). Each test run must last at least 1 hour except for testing of a temporary total enclosure (TTE) conducted using Methods 204A through 204F of 40 CFR part 51, appendix M, which require three separate test runs of at least 3 hours each; and testing of an enclosure conducted using the alternative tracer gas method in appendix A to this subpart, which requires a minimum of three separate runs of at least 20 minutes each.

(d) *Location of sampling sites.* (1) Sampling sites must be located at the inlet (if emission reduction testing or documentation of inlet methanol or formaldehyde concentration is required) and outlet of the control device (defined in §63.2292) and prior to any releases to the atmosphere. For control sequences with wet control devices (defined in §63.2292) followed by control devices (defined in §63.2292), sampling sites may be located at the inlet and outlet of the control sequence and prior to any releases to the atmosphere.

(2) Sampling sites for process units meeting compliance options without a control device must be located prior to any releases to the atmosphere. Facilities demonstrating compliance with a production-based compliance option for a process unit equipped with a wet control device must locate sampling sites prior to the wet control device.

(e) *Collection of monitoring data.* You must collect operating parameter monitoring system or continuous emissions monitoring system (CEMS) data at least every 15 minutes during the entire performance test and determine the parameter or concentration value for the operating requirement during the performance test using the methods specified in paragraphs (k) through (o) of this section.

(f) *Collection of production data.* To comply with any of the production-based compliance options, you must measure and record the process unit throughput during each performance test.

(g) *Nondetect data.* (1) Except as specified in paragraph (g)(2) of this section, all nondetect data (§63.2292) must be treated as one-half of the method detection limit when determining total HAP, formaldehyde, methanol, or total hydrocarbon (THC) emission rates.

(2) When showing compliance with the production-based compliance options in Table 1A to this subpart, you may treat emissions of an individual HAP as zero if all three of the performance test runs result in a nondetect measurement, and the method detection limit is less than or equal to 1 parts per million by volume, dry basis (ppmvd). Otherwise, nondetect data for individual HAP must be treated as one-half of the method detection limit.

(h) *Calculation of percent reduction across a control system.* When determining the control system efficiency for any control system included in your emissions averaging plan (not to exceed 90 percent) and when complying with any of the compliance options based on percent reduction across a control system in Table 1B to this subpart, as part of the performance test, you must calculate the percent reduction using Equation 1 of this section:

$$PR = CE \times \frac{ER_{in} - ER_{out}}{ER_{in}} (100) \quad (Eq. 1)$$

Where:

PR = percent reduction, percent;

CE = capture efficiency, percent (determined for reconstituted wood product presses and board coolers as required in Table 4 to this subpart);

ER_{in} = emission rate of total HAP (calculated as the sum of the emission rates of acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde), THC, formaldehyde, or methanol in the inlet vent stream of the control device, pounds per hour;

ER_{out} = emission rate of total HAP (calculated as the sum of the emission rates of acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde), THC, formaldehyde, or methanol in the outlet vent stream of the control device, pounds per hour.

(i) *Calculation of mass per unit production.* To comply with any of the production-based compliance options in Table 1A to this subpart, you must calculate your mass per unit production emissions for each performance test run using Equation 2 of this section:

$$MP = \frac{ER_{HAP}}{P \times CE} \quad (Eq. 2)$$

Where:

MP = mass per unit production, pounds per oven dried ton OR pounds per thousand square feet on a specified thickness basis (see paragraph (j) of this section if you need to convert

from one thickness basis to another);

ER_{HAP} = emission rate of total HAP (calculated as the sum of the emission rates of acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde) in the stack, pounds per hour;

P = process unit production rate (throughput), oven dried tons per hour OR thousand square feet per hour on a specified thickness basis;

CE = capture efficiency, percent (determined for reconstituted wood product presses and board coolers as required in Table 4 to this subpart).

(j) *Thickness basis conversion.* Use Equation 3 of this section to convert from one thickness basis to another:

$$MSF_B = MSF_A \times \frac{A}{B} \quad (Eq. 3)$$

Where:

MSF_A = thousand square feet on an A-inch basis;

MSF_B = thousand square feet on a B-inch basis;

A = old thickness you are converting from, inches;

B = new thickness you are converting to, inches.

(k) *Establishing thermal oxidizer operating requirements.* If you operate a thermal oxidizer, you must establish your thermal oxidizer operating parameters according to paragraphs (k)(1) through (3) of this section.

(1) During the performance test, you must continuously monitor the firebox temperature during each of the required 1-hour test runs. For regenerative thermal oxidizers, you may measure the temperature in multiple locations (e.g., one location per burner) in the combustion chamber and calculate the average of the temperature measurements prior to reducing the temperature data to 15-minute averages for purposes of establishing your minimum firebox temperature. The minimum firebox temperature must then be established as the average of the three minimum 15-minute firebox temperatures monitored during the three test runs. Multiple three-run performance tests may be conducted to establish a range of parameter values under different operating conditions.

(2) You may establish a different minimum firebox temperature for your thermal oxidizer by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (k)(1) of this section that demonstrates compliance with the applicable compliance options of this subpart.

(3) If your thermal oxidizer is a combustion unit that accepts process exhaust into the flame zone, then you are exempt from the performance testing and monitoring requirements specified in paragraphs (k)(1) and (2) of this section. To demonstrate initial compliance, you must submit documentation with your Notification of Compliance Status showing that process exhausts controlled by the combustion unit enter into the flame zone.

(l) *Establishing catalytic oxidizer operating requirements.* If you operate a catalytic oxidizer, you must establish your catalytic oxidizer operating parameters according to paragraphs (l)(1) and (2) of this section.

(1) During the performance test, you must continuously monitor during the required 1-hour test runs either the temperature at the inlet to each catalyst bed or the temperature in the combustion chamber. For regenerative catalytic oxidizers, you must calculate the average of the temperature measurements from each catalyst bed inlet or within the combustion chamber prior to reducing the temperature data to 15-minute averages for purposes of establishing your minimum catalytic oxidizer temperature. The minimum catalytic oxidizer temperature must then be established as the average of the three minimum 15-minute temperatures monitored during the three test runs. Multiple three-run performance tests may be conducted to establish a range of parameter values under different operating conditions.

(2) You may establish a different minimum catalytic oxidizer temperature by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraphs (l)(1) and (2) of this section that demonstrates compliance with the applicable compliance options of this subpart.

(m) *Establishing biofilter operating requirements.* If you operate a biofilter, you must establish your biofilter operating requirements according to paragraphs (m)(1) through (3) of this section.

(1) During the performance test, you must continuously monitor the biofilter bed temperature during each of the required 1-hour test runs. To monitor biofilter bed temperature, you may use multiple thermocouples in representative locations throughout the biofilter bed and calculate the average biofilter bed temperature across these thermocouples prior to reducing the temperature data to 15-minute averages for purposes of establishing biofilter bed temperature limits. The biofilter bed temperature range must be established as the minimum and maximum 15-minute biofilter bed temperatures monitored during the three test runs. You may base your biofilter bed temperature range on values recorded during previous performance tests provided that the data used to establish the temperature ranges have been obtained using the test methods required in this subpart. If you use data from previous performance tests, you must certify that the biofilter and associated process unit(s) have not been modified subsequent to the date of the performance tests. Replacement of the biofilter media with the same type of material is not considered a modification of the biofilter for purposes of this section.

(2) For a new biofilter installation, you will be allowed up to 180 days following the compliance date or 180 days following initial startup of the biofilter to complete the requirements in paragraph (m)(1) of this section.

(3) You may expand your biofilter bed temperature operating range by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (m)(1) of this section that demonstrates compliance with the applicable compliance options of this subpart.

(n) *Establishing operating requirements for process units meeting compliance options without a control device.* If you operate a process unit that meets a compliance option in Table 1A to this subpart, or is a process unit that generates debits in an emissions average without the use of a control device, you must establish your process unit operating parameters according to paragraphs (n)(1) through (2) of this section.

(1) During the performance test, you must identify and document the process unit controlling parameter(s) that affect total HAP emissions during the three-run performance test. The controlling parameters you identify must coincide with the representative operating conditions you describe according to §63.2262(b)(2). For each parameter, you must specify appropriate monitoring methods, monitoring frequencies, and for continuously monitored parameters, averaging times not to exceed 24 hours. The operating limit for each controlling parameter must then be established as the minimum, maximum, range, or average (as appropriate depending on the parameter) recorded during the performance test. Multiple three-run performance tests may be conducted to establish a range of parameter values under different operating conditions.

(2) You may establish different controlling parameter limits for your process unit by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (n)(1) of this section that demonstrates compliance with the compliance options in Table 1A to this subpart or is used to establish emission averaging debits for an uncontrolled process unit.

(o) *Establishing operating requirements using THC CEMS.* If you choose to meet the operating requirements by monitoring THC concentration instead of monitoring control device or process operating parameters, you must establish your THC concentration operating requirement according to paragraphs (o)(1) through (2) of this section.

(1) During the performance test, you must continuously monitor THC concentration using your CEMS during each of the required 1-hour test runs. The maximum THC concentration must then be established as the average of the three maximum 15-minute THC concentrations monitored during the three test runs. Multiple three-run performance tests may be conducted to establish a range of THC concentration values under different operating conditions.

(2) You may establish a different maximum THC concentration by submitting the notification specified in §63.2280(g) and conducting a repeat performance test as specified in paragraph (o)(1) of this section that demonstrates compliance with the compliance options in Tables 1A and 1B to this subpart.

[69 FR 46011, July 30, 2004, as amended at 71 FR 8372, Feb. 16, 2006]

§ 63.2263 Initial compliance demonstration for a dry rotary dryer.

If you operate a dry rotary dryer, you must demonstrate that your dryer processes furnish with an inlet moisture content of less than or equal to 30 percent (by weight, dry basis) and operates with a dryer inlet temperature of less than or equal to 600 °F. You must designate and clearly identify each dry rotary dryer. You must record the inlet furnish moisture content (dry basis) and inlet dryer operating temperature according to §63.2269(a), (b), and (c) and §63.2270 for a minimum of 30 calendar days. You must submit the highest recorded 24-hour average inlet furnish moisture content and the highest recorded 24-hour average dryer inlet temperature with your Notification of Compliance Status. In addition, you must submit with the Notification of Compliance Status a signed statement by a responsible official that certifies with truth, accuracy, and completeness that the dry rotary dryer will dry furnish with a maximum inlet moisture content less than or equal to 30 percent (by weight, dry basis) and will operate with a maximum inlet temperature of less than or equal to 600 °F in the future.

§ 63.2264 Initial compliance demonstration for a hardwood veneer dryer.

If you operate a hardwood veneer dryer, you must record the annual volume percentage of softwood veneer species processed in the dryer as follows:

(a) Use Equation 1 of this section to calculate the annual volume percentage of softwood species dried:

$$SW_{\%} = \frac{SW}{T} (100) \quad (Eq. 1)$$

Where:

SW%= annual volume percent softwood species dried;

SW = softwood veneer dried during the previous 12 months, thousand square feet (3/8-inch basis);

T = total softwood and hardwood veneer dried during the previous 12 months, thousand square feet (3/8-inch basis).

(b) You must designate and clearly identify each hardwood veneer dryer. Submit with the Notification of Compliance Status the annual volume percentage of softwood species dried in the dryer based on your dryer production for the 12 months prior to the compliance date specified for your source in §63.2233. If you did not dry any softwood species in the dryer during the 12 months prior to the compliance date, then you need only to submit a statement indicating that no softwood species were dried. In addition, submit with the Notification of Compliance Status a signed statement by a responsible official that certifies with truth, accuracy, and completeness that the veneer dryer will be used to process less than 30 volume percent softwood species in the future.

§ 63.2265 Initial compliance demonstration for a softwood veneer dryer.

If you operate a softwood veneer dryer, you must develop a plan for review and approval for minimizing fugitive emissions from the veneer dryer heated zones, and you must submit the plan with your Notification of Compliance Status.

§ 63.2266 Initial compliance demonstration for a veneer redryer.

If you operate a veneer redryer, you must record the inlet moisture content of the veneer processed in the redryer according to §63.2269(a) and (c) and §63.2270 for a minimum of 30 calendar days. You must designate and clearly identify each veneer redryer. You must submit the highest recorded 24-hour average inlet veneer moisture content with your Notification of Compliance Status to show that your veneer redryer processes veneer with an inlet moisture content of less than or equal to 25 percent (by weight, dry basis). In addition, submit with the Notification of Compliance Status a signed statement by a responsible official that certifies with truth, accuracy, and completeness that the veneer redryer will dry veneer with a moisture content less than 25 percent (by weight, dry basis) in the future.

§ 63.2267 Initial compliance demonstration for a reconstituted wood product press or board cooler.

If you operate a reconstituted wood product press at a new or existing affected source or a reconstituted wood product board cooler at a new affected source, then you must either use a wood products enclosure as defined in §63.2292 or measure the capture efficiency of the capture device for the press or board cooler using Methods 204 and 204A through 204F of 40 CFR part 51, appendix M (as appropriate), or using the alternative tracer gas method contained in appendix A to this subpart. You must submit documentation that the wood products enclosure meets the press enclosure design criteria in §63.2292 or the results of the capture efficiency verification with your Notification of Compliance Status.

§ 63.2268 Initial compliance demonstration for a wet control device.

If you use a wet control device as the sole means of reducing HAP emissions, you must develop and implement a plan for review and approval 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 such that the desired emissions reductions are obtained. You must submit the plan with your Notification of Compliance Status.

§ 63.2269 What are my monitoring installation, operation, and maintenance requirements?

(a) *General continuous parameter monitoring requirements.* You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to paragraphs (a)(1) through (3) of this section.

(1) The CPMS must be capable of completing a minimum of one cycle of operation (sampling, analyzing, and recording) for each successive 15-minute period.

(2) At all times, you must maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(3) Record the results of each inspection, calibration, and validation check.

(b) *Temperature monitoring.* For each temperature monitoring device, you must meet the requirements in paragraphs (a) and (b) (1) through (6) of this section.

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) Use a temperature sensor with a minimum accuracy of 4 °F or 0.75 percent of the temperature value, whichever is larger.

(3) If a chart recorder is used, it must have a sensitivity with minor divisions not more than 20 °F.

(4) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30 °F of the process temperature sensor's reading.

(5) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(6) At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(c) *Wood moisture monitoring.* For each furnish or veneer moisture meter, you must meet the requirements in paragraphs (a)(1) through (3) and paragraphs (c)(1) through (5) of this section.

(1) For dry rotary dryers, use a continuous moisture monitor with a minimum accuracy of 1 percent (dry basis) moisture or better in the 25 to 35 percent (dry basis) moisture content range. For veneer redryers, use a continuous moisture monitor with a minimum accuracy of 3 percent (dry basis) moisture or better in the 15 to 25 percent (dry basis) moisture content range. Alternatively, you may use a continuous moisture monitor with a minimum accuracy of 5 percent (dry basis) moisture or better for dry rotary dryers used to dry furnish with less than 25 percent (dry basis) moisture or for veneer redryers used to redry veneer with less than 20 percent (dry basis) moisture.

(2) Locate the moisture monitor in a position that provides a representative measure of furnish or veneer moisture.

(3) Calibrate the moisture monitor based on the procedures specified by the moisture monitor manufacturer at least once per semiannual compliance period (or more frequently if recommended by the moisture monitor manufacturer).

(4) At least quarterly, inspect all components of the moisture monitor for integrity and all electrical connections for continuity.

(5) Use Equation 1 of this section to convert percent moisture measurements wet basis to a dry basis:

$$MC_{dry} = \frac{MC_{wet}/100}{1 - (MC_{wet}/100)} (100) \quad (Eq. 1)$$

Where:

MC_{dry} = percent moisture content of wood material (weight percent, dry basis);

MC_{wet} = percent moisture content of wood material (weight percent, wet basis).

(d) *Continuous emission monitoring system(s).* Each CEMS must be installed, operated, and maintained according to paragraphs (d)(1) through (4) of this section.

(1) Each CEMS for monitoring THC concentration must be installed, operated, and maintained according to Performance Specification 8 of 40 CFR part 60, appendix B. You must also comply with Procedure 1 of 40 CFR part 60, appendix F.

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to Performance Specification 8 of 40 CFR part 60, appendix B.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and §63.2270(d) and (e).

[69 FR 46011, July 30, 2004, as amended at 71 FR 8372, Feb. 16, 2006]

Continuous Compliance Requirements

§ 63.2270 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) Except for, as appropriate, monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the process unit is operating. For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities; data recorded during periods of startup, shutdown, and malfunction; or data recorded during periods of control device downtime covered in any approved routine control device maintenance exemption in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control system.

(d) Except as provided in paragraph (e) of this section, determine the 3-hour block average of all recorded readings, calculated after every 3 hours of operation as the average of the evenly spaced recorded readings in the previous 3 operating hours (excluding periods described in paragraphs (b) and (c) of this section).

(e) For dry rotary dryer and veneer redryer wood moisture monitoring, dry rotary dryer temperature monitoring, biofilter bed temperature monitoring, and biofilter outlet THC monitoring, determine the 24-hour block average of all recorded readings, calculated after every 24 hours of operation as the average of the evenly spaced recorded readings in the previous 24 operating hours (excluding periods described in paragraphs (b) and (c) of this section).

(f) To calculate the data averages for each 3-hour or 24-hour averaging period, you must have at least 75 percent of the required recorded readings for that period using only recorded readings that are based on valid data (i.e., not from periods described in paragraphs (b) and (c) of this section).

§ 63.2271 How do I demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements?

(a) You must demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements in §§63.2240 and 63.2241 that apply to you according to the methods specified in Tables 7 and 8 to this subpart.

(b) You must report each instance in which you did not meet each compliance option, operating requirement, and work practice requirement in Tables 7 and 8 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction and periods of control device maintenance specified in paragraphs (b)(1) through (3) of this section. These instances are deviations from the compliance options, operating requirements, and work practice requirements in this subpart. These deviations must be reported according to the requirements in §63.2281.

(1) [Reserved]

(2) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

(3) Deviations that occur during periods of control device maintenance covered by any approved routine control device maintenance exemption are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with the approved routine control device maintenance exemption.

[69 FR 46011, July 30, 2004, as amended at 71 FR 20463, Apr. 20, 2006]

Notifications, Reports, and Records

§ 63.2280 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9 (b) through (e), and (g) and (h) by the dates specified.

(b) You must submit an Initial Notification no later than 120 calendar days after September 28, 2004, or after initial startup, whichever is later, as specified in §63.9(b)(2).

(c) If you are required to conduct a performance test, you must submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in §63.7(b)(1).

(d) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 4, 5, and 6 to this subpart, you must submit a Notification of Compliance Status as specified in §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 or 6 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Tables 5 and 6 to this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

(e) If you request a routine control device maintenance exemption according to §63.2251, you must submit your request for the exemption no later than 30 days before the compliance date.

(f) If you use the emissions averaging compliance option in §63.2240(c), you must submit an Emissions Averaging Plan to the EPA Administrator for approval no later than 1 year before the compliance date or no later than 1 year before the date you would begin using an emissions average, whichever is later. The Emissions Averaging Plan must include the information in paragraphs (f)(1) through (6) of this section.

(1) Identification of all the process units to be included in the emissions average indicating which process units will be used to generate credits, and which process units that are subject to compliance options in Tables 1A and 1B to this subpart will be uncontrolled (used to generate debits) or under-controlled (used to generate debits and credits).

(2) Description of the control system used to generate emission credits for each process unit used to generate credits.

(3) Determination of the total HAP control efficiency for the control system used to generate emission credits for each credit-generating process unit.

(4) Calculation of the RMR and AMR, as calculated using Equations 1 through 3 of §63.2240(c)(1).

(5) Documentation of total HAP measurements made according to §63.2240(c)(2)(iv) and other relevant documentation to support calculation of the RMR and AMR.

(6) A summary of the operating parameters you will monitor and monitoring methods for each debit-generating and credit-generating process unit.

(g) You must notify the EPA Administrator within 30 days before you take any of the actions specified in paragraphs (g)(1) through (3) of this section.

(1) You modify or replace the control system for any process unit subject to the compliance options and operating requirements in this subpart.

(2) You shut down any process unit included in your Emissions Averaging Plan.

(3) You change a continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit or control device.

§ 63.2281 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and as specified in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.2233 ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months. For example, if your compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

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

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for the semiannual reporting period ending on June 30 and December 31, respectively.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information in paragraphs (c)(1) through (8) of this section.

(1) Company name and address.

(2) 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.

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

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information specified in §63.10(d)(5)(i).

(5) A description of control device maintenance performed while the control device was offline and one or more of the process units controlled by the control device was operating, including the information specified in paragraphs (c)(5)(i) through (iii) of this section.

(i) The date and time when the control device was shut down and restarted.

(ii) Identification of the process units that were operating and the number of hours that each process unit operated while the control device was offline.

(iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance exemption developed pursuant to §63.2251. If the control device maintenance was included in your approved routine control device maintenance exemption, then you must report the information in paragraphs (c)(5)(iii)(A) through (C) of this section.

(A) The total amount of time that each process unit controlled by the control device operated during the semiannual compliance period and during the previous semiannual compliance period.

(B) The amount of time that each process unit controlled by the control device operated while the control device was down for maintenance covered under the routine control device maintenance exemption during the semiannual compliance period and during the previous semiannual compliance period.

(C) Based on the information recorded under paragraphs (c)(5)(iii)(A) and (B) of this section for each process unit, compute the annual percent of process unit operating uptime during which the control device was offline for routine maintenance using Equation 1 of this section.

$$RM = \frac{DT_p + DT_c}{PU_p + PU_c} \quad (\text{Eq. 1})$$

Where:

RM = Annual percentage of process unit uptime during which control device is down for routine control device maintenance;

PU_p = Process unit uptime for the previous semiannual compliance period;

PU_c = Process unit uptime for the current semiannual compliance period;

DT_p = Control device downtime claimed under the routine control device maintenance exemption for the previous semiannual compliance period;

DT_c = Control device downtime claimed under the routine control device maintenance exemption for the current semiannual compliance period.

(6) The results of any performance tests conducted during the semiannual reporting period.

(7) If there are no deviations from any applicable compliance option or operating requirement, and there are no deviations from the requirements for work practice requirements in Table 8 to this subpart, a statement that there were no deviations from the compliance options, operating requirements, or work practice requirements during the reporting period.

(8) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to this subpart that occurs at an affected source where you are not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (6) of this section and in paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.

(1) The total operating time of each affected source during the reporting period.

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

(e) For each deviation from a compliance option or operating requirement occurring at an affected source where you are using a CMS to comply with the compliance options and operating requirements in this subpart, you must include the information in paragraphs (c)(1) through (6) and paragraphs (e)(1) through (11) of this section. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during a period of control device maintenance covered in your approved routine control device maintenance exemption; or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

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

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) If you comply with the emissions averaging compliance option in §63.2240(c), you must include in your semiannual compliance report calculations based on operating data from the semiannual reporting period that demonstrate that actual mass removal equals or exceeds the required mass removal.

(g) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any compliance option, operating requirement, or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

§ 63.2282 What records must I keep?

(a) You must keep the records listed in paragraphs (a)(1) through (4) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Documentation of your approved routine control device maintenance exemption, if you request such an exemption under §63.2251.

(4) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(b) You must keep the records required in Tables 7 and 8 to this subpart to show continuous compliance with each compliance option, operating requirement, and work practice requirement that applies to you.

(c) For each CEMS, you must keep the following records.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Request for alternatives to relative accuracy testing for CEMS as required in §63.8(f)(6)(i).

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

(d) If you comply with the emissions averaging compliance option in §63.2240(c), you must keep records of all information required to calculate emission debits and credits.

(e) If you operate a catalytic oxidizer, you must keep records of annual catalyst activity checks and subsequent corrective actions.

§ 63.2283 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review as specified in §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.2290 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.13 apply to you.

§ 63.2291 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 EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if 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 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

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

(1) Approval of alternatives to the compliance options, operating requirements, and work practice requirements in §§63.2240 and 63.2241 as specified in §63.6(g). For the purposes of delegation authority under 40 CFR part 63, subpart E, "compliance options" represent "emission limits"; "operating requirements" represent "operating limits"; and "work practice requirements" represent "work practice standards."

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

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

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

[69 FR 46011, July 30, 2004, as amended at 72 FR 61063, Oct. 29, 2007]

§ 63.2292 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, the General Provisions, and in this section as follows:

Affected source means the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations (including any combustion unit exhaust stream routinely used to direct fire process unit(s)), resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other NESHAP). The affected source also includes onsite storage of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing; and miscellaneous coating operations (defined elsewhere in this section). The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.

Agricultural fiber means the fiber of an annual agricultural crop. Examples of agricultural fibers include, but are not limited to, wheat straw, rice straw, and bagasse.

Biofilter means an enclosed control system such as a tank or series of tanks with a fixed roof that contact emissions with a solid media (such as bark) and use microbiological activity to transform organic pollutants in a process exhaust stream to innocuous compounds such as carbon dioxide, water, and inorganic salts. Wastewater treatment systems such as aeration lagoons or activated sludge systems are not considered to be biofilters.

Capture device means a hood, enclosure, or other means of collecting emissions into a duct so that the emissions can be measured.

Capture efficiency means the fraction (expressed as a percentage) of the pollutants from an emission source that are collected by a capture device.

Catalytic oxidizer means a control system that combusts or oxidizes, in the presence of a catalyst, exhaust gas from a process unit. Catalytic oxidizers include regenerative catalytic oxidizers and thermal catalytic oxidizers.

Combustion unit means a dryer burner, process heater, or boiler. Combustion units may be used for combustion of organic HAP emissions.

Control device means any equipment that reduces the quantity of HAP emitted to the air. The device may destroy the HAP or secure the HAP for subsequent recovery. Control devices include, but are not limited to, thermal or catalytic oxidizers, combustion units that incinerate process exhausts, biofilters, and condensers.

Control system or add-on control system means the combination of capture and control devices used to reduce HAP emissions to the atmosphere.

Conveyor strand dryer means a conveyor dryer used to reduce the moisture of wood strands used in the manufacture of oriented strandboard, laminated strand lumber, or other wood strand-based products. A *conveyor strand dryer* is a process unit.

Conveyor strand dryer zone means each portion of a conveyor strand dryer with a separate heat exchange system and exhaust vent(s). Conveyor strand dryers contain multiple zones (e.g., three zones), which may be divided into multiple sections.

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

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any compliance option, operating requirement, or work practice requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any compliance option, operating requirement, or work practice requirement in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart. A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Direct-fired process unit means a process unit that is heated by the passing of combustion exhaust through the process unit such that the process material is contacted by the combustion exhaust.

Dryer heated zones means the zones of a softwood veneer dryer or fiberboard mat dryer that are equipped with heating and hot air circulation units. The cooling zone(s) of the dryer through which ambient air is blown are not part of the dryer heated zones.

Dry forming means the process of making a mat of resinated fiber to be compressed into a reconstituted wood product such as particleboard, oriented strandboard, medium density fiberboard, or hardboard.

Dry rotary dryer means a rotary dryer that dries wood particles or fibers with a maximum inlet moisture content of less than or equal to 30 percent (by weight, dry basis) and operates with a maximum inlet temperature of less than or equal to 600 °F. A dry rotary dryer is a process unit.

Engineered wood product means a product made with lumber, veneers, strands of wood, or from other small wood elements that are bound together with resin. Engineered wood products include, but are not limited to, laminated strand lumber, laminated veneer lumber, parallel strand lumber, wood I-joists, and glue-laminated beams.

Fiber means the discrete elements of wood or similar cellulosic material, which are separated by mechanical means, as in refining, that can be formed into boards.

Fiberboard means a composite panel composed of cellulosic fibers (usually wood or agricultural material) made by wet forming and compacting a mat of fibers. Fiberboard density generally is less than 0.50 grams per cubic centimeter (31.5 pounds per cubic foot).

Fiberboard mat dryer means a dryer used to reduce the moisture of wet-formed wood fiber mats by applying heat. A *fiberboard mat dryer* is a process unit.

Flame zone means the portion of the combustion chamber in a combustion unit that is occupied by the flame envelope.

Furnish means the fibers, particles, or strands used for making boards.

Glue-laminated beam means a structural wood beam made by bonding lumber together along its faces with resin.

Green rotary dryer means a rotary dryer that dries wood particles or fibers with an inlet moisture content of greater than 30 percent (by weight, dry basis) at any dryer inlet temperature or operates with an inlet temperature of greater than 600 °F with any inlet moisture content. A *green rotary dryer* is a process unit.

Group 1 miscellaneous coating operations means application of edge seals, nail lines, logo (or other information) paint, shelving edge fillers, trademark/grade stamp links, and wood putty patches to plywood and composite wood products (except kiln-dried lumber) on the same site where the plywood and composite wood products are manufactured. Group 1 miscellaneous coating operations also include application of synthetic patches to plywood at new affected sources.

Hardboard means a composite panel composed of inter-felted cellulosic fibers made by dry or wet forming and pressing of a resinated fiber mat. Hardboard generally has a density of 0.50 grams per cubic centimeter (31.5 pounds per cubic foot) or greater.

Hardboard oven means an oven used to heat treat or temper hardboard after hot pressing. Humidification chambers are not considered as part of hardboard ovens. A *hardboard oven* is a process unit.

Hardwood means the wood of a broad-leaved tree, either deciduous or evergreen. Examples of hardwoods include, but are not limited to, aspen, birch, poplar, and oak.

Hardwood veneer dryer means a dryer that removes excess moisture from veneer by conveying the veneer through a heated medium on rollers, belts, cables, or wire mesh. Hardwood veneer dryers are used to dry veneer with less than 30 percent softwood species on an annual volume basis. Veneer kilns that operate as batch units, veneer dryers heated by radio frequency or microwaves that are used to redry veneer, and veneer redryers (defined elsewhere in this section) that are heated by conventional means are not considered to be hardwood veneer dryers. A *hardwood veneer dryer* is a process unit.

Kiln-dried lumber means solid wood lumber that has been dried in a lumber kiln.

Laminated strand lumber (LSL) means a composite product formed into a billet made of thin wood strands cut from whole logs, resinated, and pressed together with the grain of each strand oriented parallel to the length of the finished product.

Laminated veneer lumber (LVL) means a composite product formed into a billet made from layers of resinated wood veneer sheets or pieces pressed together with the grain of each veneer aligned primarily along the length of the finished product. *Laminated veneer lumber* is also known as parallel strand lumber (PSL).

Lumber means boards or planks sawed or split from logs or timber, including logs or timber processed for use as utility poles or other wood components. Lumber can be either green (non-dried) or dried. Lumber is typically either air-dried or kiln-dried.

Lumber kiln means an enclosed dryer operated by applying heat to reduce the moisture content of lumber.

Medium density fiberboard (MDF) means a composite panel composed of cellulosic fibers (usually wood or agricultural fiber) made by dry forming and pressing of a resinated fiber mat.

Method detection limit means the minimum concentration of an analyte that can be determined with 99 percent confidence that the true value is greater than zero.

Miscellaneous coating operations means application of any of the following to plywood or composite wood products: edge seals, moisture sealants, anti-skid coatings, company logos, trademark or grade stamps, nail lines, synthetic patches, wood patches, wood putty, concrete forming oils, glues for veneer composing, and shelving edge fillers. Miscellaneous coating operations also include the application of primer to oriented strandboard siding that occurs at the same site as oriented strandboard manufacture and application of asphalt, clay slurry, or titanium dioxide coatings to fiberboard at the same site of fiberboard manufacture.

Molded particleboard means a shaped composite product (other than a composite panel) composed primarily of cellulosic materials (usually wood or agricultural fiber) generally in the form of discrete pieces or particles, as distinguished from fibers, which are pressed together with resin.

MSF means thousand square feet (92.9 square meters). Square footage of panels is usually measured on a thickness basis, such as 3/8-inch, to define the total volume of panels. Equation 6 of §63.2262(j) shows how to convert from one thickness basis to another.

Nondetect data means, for the purposes of this subpart, any value that is below the method detection limit.

Non-HAP coating means a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0 percent by mass for other HAP compounds.

1-hour period means a 60-minute period.

Oriented strandboard (OSB) means a composite panel produced from thin wood strands cut from whole logs, formed into resinated layers (with the grain of strands in one layer oriented perpendicular to the strands in adjacent layers), and pressed.

Oven-dried ton(s) (ODT) means tons of wood dried until all of the moisture in the wood is removed. One oven-dried ton equals 907 oven-dried kilograms.

Parallel strand lumber (PSL) means a composite product formed into a billet made from layers of resinated wood veneer sheets or pieces pressed together with the grain of each veneer aligned primarily along the length of the finished product. *Parallel strand lumber* is also known as laminated veneer lumber (LVL).

Partial wood products enclosure means an enclosure that does not meet the design criteria for a wood products enclosure as defined in this subpart.

Particle means a discrete, small piece of cellulosic material (usually wood or agricultural fiber) produced mechanically and used as the aggregate for a particleboard.

Particleboard means a composite panel composed primarily of cellulosic materials (usually wood or agricultural fiber) generally in the form of discrete pieces or particles, as distinguished from fibers, which are pressed together with resin.

Plywood means a panel product consisting of layers of wood veneers hot pressed together with resin. Plywood includes panel

products made by hot pressing (with resin) veneers to a substrate such as particleboard, medium density fiberboard, or lumber. Plywood products may be flat or curved.

Plywood and composite wood products (PCWP) manufacturing facility means a facility that manufactures plywood and/or composite wood products by bonding wood material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a panel, engineered wood product, or other product defined in §63.2292. Plywood and composite wood products manufacturing facilities also include facilities that manufacture dry veneer and lumber kilns located at any facility. Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, molded particleboard, oriented strandboard, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, kiln-dried lumber, and glue-laminated beams.

Press predryer means a dryer used to reduce the moisture and elevate the temperature by applying heat to a wet-formed fiber mat before the mat enters a hot press. A *press predryer* is a process unit.

Pressurized refiner means a piece of equipment operated under pressure for preheating (usually by steaming) wood material and refining (rubbing or grinding) the wood material into fibers. Pressurized refiners are operated with continuous infeed and outfeed of wood material and maintain elevated internal pressures (i.e., there is no pressure release) throughout the preheating and refining process. A *pressurized refiner* is a process unit.

Primary tube dryer means a single-stage tube dryer or the first stage of a multi-stage tube dryer. Tube dryer stages are separated by vents for removal of moist gases between stages (e.g., a product cyclone at the end of a single-stage dryer or between the first and second stages of a multi-stage tube dryer). The first stage of a multi-stage tube dryer is used to remove the majority of the moisture from the wood furnish (compared to the moisture reduction in subsequent stages of the tube dryer). Blow-lines used to apply resin are considered part of the primary tube dryer. A *primary tube dryer* is a process unit.

Process unit means equipment classified according to its function such as a blender, dryer, press, former, or board cooler.

Reconstituted wood product board cooler means a piece of equipment designed to reduce the temperature of a board by means of forced air or convection within a controlled time period after the board exits the reconstituted wood product press unloader. Board coolers include wicket and star type coolers commonly found at medium density fiberboard and particleboard plants. Board coolers do not include cooling sections of dryers (e.g., veneer dryers or fiberboard mat dryers) or coolers integrated into or following hardboard bake ovens or humidifiers. A *reconstituted wood product board cooler* is a process unit.

Reconstituted wood product press means a press, including (if applicable) the press unloader, that presses a resinated mat of wood fibers, particles, or strands between hot platens or hot rollers to compact and set the mat into a panel by simultaneous application of heat and pressure. Reconstituted wood product presses are used in the manufacture of hardboard, medium density fiberboard, particleboard, and oriented strandboard. Extruders are not considered to be reconstituted wood product presses. A *reconstituted wood product press* is a process unit.

Representative operating conditions means operation of a process unit during performance testing under the conditions that the process unit will typically be operating in the future, including use of a representative range of materials (e.g., wood material of a typical species mix and moisture content or typical resin formulation) and representative operating temperature range.

Resin means the synthetic adhesive (including glue) or natural binder, including additives, used to bond wood or other cellulosic materials together to produce plywood and composite wood products.

Responsible official means responsible official as defined in 40 CFR 70.2 and 40 CFR 71.2.

Rotary strand dryer means a rotary dryer operated by applying heat and used to reduce the moisture of wood strands used in the manufacture of oriented strandboard, laminated strand lumber, or other wood strand-based products. A *rotary strand dryer* is a process unit.

Secondary tube dryer means the second stage and subsequent stages following the primary stage of a multi-stage tube dryer. Secondary tube dryers, also referred to as relay dryers, operate at lower temperatures than the primary tube dryer they follow. Secondary tube dryers are used to remove only a small amount of the furnish moisture compared to the furnish moisture reduction across the primary tube dryer. A *secondary tube dryer* is a process unit.

Softwood means the wood of a coniferous tree. Examples of softwoods include, but are not limited to, Southern yellow pine, Douglas fir, and White spruce.

Softwood veneer dryer means a dryer that removes excess moisture from veneer by conveying the veneer through a heated medium, generally on rollers, belts, cables, or wire mesh. Softwood veneer dryers are used to dry veneer with greater than or equal to 30 percent softwood species on an annual volume basis. Veneer kilns that operate as batch units, veneer dryers heated by radio frequency or microwaves that are used to redry veneer, and veneer redryers (defined elsewhere in this section) that are heated by conventional means are not considered to be softwood veneer dryers. A *softwood veneer dryer* is a process unit.

Startup means bringing equipment online and starting the production process.

Startup, initial means the first time equipment is put into operation. Initial startup does not include operation solely for testing equipment. Initial startup does not include subsequent startups (as defined in this section) following malfunction or shutdowns or following changes in product or between batch operations. Initial startup does not include startup of equipment that occurred when

the source was an area source.

Startup, shutdown, and malfunction plan (SSMP) means a plan developed according to the provisions of §63.6(e)(3).

Strand means a long (with respect to thickness and width), flat wood piece specially cut from a log for use in oriented strandboard, laminated strand lumber, or other wood strand-based product.

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

Thermal oxidizer means a control system that combusts or oxidizes exhaust gas from a process unit. Thermal oxidizers include regenerative thermal oxidizers and combustion units.

Total hazardous air pollutant emissions means, for purposes of this subpart, the sum of the emissions of the following six compounds: acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde.

Tube dryer means a single-stage or multi-stage dryer operated by applying heat to reduce the moisture of wood fibers or particles as they are conveyed (usually pneumatically) through the dryer. Resin may or may not be applied to the wood material before it enters the tube dryer. Tube dryers do not include pneumatic fiber transport systems that use temperature and humidity conditioned pneumatic system supply air in order to prevent cooling of the wood fiber as it is moved through the process. A *tube dryer* is a process unit.

Veneer means thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as plywood, laminated veneer lumber, or other products.

Veneer redryer means a dryer heated by conventional means, such as direct wood-fired, direct-gas-fired, or steam heated, that is used to redry veneer that has been previously dried. Because the veneer dried in a veneer redryer has been previously dried, the inlet moisture content of the veneer entering the redryer is less than 25 percent (by weight, dry basis). Batch units used to redry veneer (such as redry cookers) are not considered to be veneer redryers. A *veneer redryer* is a process unit.

Wet control device means any equipment that uses water as a means of collecting an air pollutant. Wet control devices include scrubbers, wet electrostatic precipitators, and electrified filter beds. Wet control devices do not include biofilters or other equipment that destroys or degrades HAP.

Wet forming means the process of making a slurry of water, fiber, and additives into a mat of fibers to be compressed into a fiberboard or hardboard product.

Wood I-joists means a structural wood beam with an I-shaped cross section formed by bonding (with resin) wood or laminated veneer lumber flanges onto a web cut from a panel such as plywood or oriented strandboard.

Wood products enclosure means a permanently installed containment that was designed to meet the following physical design criteria:

- (1) Any natural draft opening shall be at least four equivalent opening diameters from each HAP-emitting point, except for where board enters and exits the enclosure, unless otherwise specified by the EPA Administrator.
- (2) The total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
- (3) The average facial velocity of air through all natural draft openings shall be at least 3,600 meters per hour (200 feet per minute). The direction of airflow through all natural draft openings shall be into the enclosure.
- (4) All access doors and windows whose areas are not included in item 2 of this definition and are not included in the calculation of facial velocity in item 3 of this definition shall be closed during routine operation of the process.
- (5) The enclosure is designed and maintained to capture all emissions for discharge through a control device.

Work practice requirement means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[69 FR 46011, July 30, 2004, as amended at 71 FR 8372, Feb. 16, 2006]

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

	You must meet the following
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For the following process units . . .	production-based compliance option (total HAP^abasis) . . .
(1) Fiberboard mat dryer heated zones (at new affected sources only)	0.022 lb/MSF 1/2&inch;.
(2) Green rotary dryers	0.058 lb/ODT.
(3) Hardboard ovens	0.022 lb/MSF 1/8&inch;.
(4) Press predryers (at new affected sources only)	0.037 lb/MSF 1/2&inch;.
(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&inch;.
(8) Reconstituted wood product presses	0.30 lb/MSF 3/4&inch;.
(9) Softwood veneer dryer heated zones	0.022 lb/MSF 3/8&inch;.
(10) Rotary strand dryers	0.18 lb/ODT.
(11) Secondary tube dryers	0.010 lb/ODT.

^aTotal 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 . . .	You must comply with one of the following six compliance options by using an emissions control system . . .
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)	(1) Reduce emissions of total HAP, measured as THC (as carbon) ^a , by 90 percent; or (2) Limit emissions of total HAP, measured as THC (as carbon) ^a , to 20 ppmvd; or (3) Reduce methanol emissions by 90 percent; or (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 (5) Reduce formaldehyde emissions by 90 percent; or (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.
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^aYou may choose to subtract methane from THC as carbon measurements.

Table 2 to Subpart DDDD of Part 63—Operating Requirements

If you operate a(n) . . .	You must . . .	Or you must . . .
(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.

^aYou 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	Use non-HAP coatings as defined in §63.2292.

operations	
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Table 4 to Subpart DDDD of Part 63—Requirements for Performance Tests

For . . .	You must . . .	Using . . .
(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	measure	Method 320 in appendix A to 40 CFR

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)	emissions of total HAP (as defined in §63.2292)	part 63; OR the NCASI Method IM/CAN/WP-99.02 (IBR, see §63.14(f)); OR the NCASI Method ISS/FP-A105.01 (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)); OR the NCASI Method ISS/FP-A105.01 (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-99.02 (IBR, see §63.14(f)); OR the NCASI Method ISS/FP-A105.01 (IBR, see §63.14(f)).
(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	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 the tracer gas method contained in appendix A to this subpart.
(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	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. Enclosures that meet the design criteria (1) through (4) in the definition of wood products enclosure, or that meet Method 204 requirements for a PTE (except for the criteria specified in section 6.2 of Method 204) are assumed to have a capture efficiency of 100 percent. Measured emissions divided by the capture efficiency provides the emission rate.
(11) each process unit subject to a compliance option in tables 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	data from the parameter monitoring system or THC CEMS and the applicable performance test method (s).

[71 FR 8373, Feb. 16, 2006]

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 to this subpart	Reduce methanol or formaldehyde emissions by 90 percent	The methanol or formaldehyde 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.
(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

For each . . .	For the following work practice requirements . . .	You have demonstrated initial compliance if . . .
(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	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

	600 °F	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

For ...	For the following compliance options and operating requirements ...	You must demonstrate continuous compliance by ...
(1) Each process	Compliance options in	Collecting and recording the

<p>unit listed in Table 1B to this subpart or used in calculation of an emissions average under §63.2240(c)</p>	<p>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</p>	<p>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.</p>
<p>(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)</p>	<p>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</p>	<p>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.</p>
<p>(3) Each process unit using a biofilter</p>	<p>Compliance options in Tables 1B to this subpart or the emissions averaging compliance option in §63.2240(c)</p>	<p>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.</p>
<p>(4) Each process unit using a catalytic oxidizer</p>	<p>Compliance options in Table 1B to this subpart or the emissions averaging compliance option in §63.2240(c)</p>	<p>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.</p>

<p>(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 §63.2240 (c)</p>	<p>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 subpart based on monitoring of process unit controlling operating parameters</p>	<p>Collecting and recording on a daily basis process unit controlling operating parameter data; AND maintaining the operating parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established according to §63.2262.</p>
<p>(6) Each Process unit listed in Table 1B to this subpart using a wet control device as the sole means of reducing HAP emissions</p>	<p>Compliance options in Table 1B to this subpart or the emissions averaging compliance option in §63.2240(c)</p>	<p>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.</p>

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 ...
<p>(1) Dry rotary dryer</p>	<p>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</p>	<p>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.</p>
<p>(2) Hardwood veneer dryer</p>	<p>Process less than 30 volume percent softwood species</p>	<p>Maintaining the volume percent softwood species processed below 30 percent AND keeping records of the volume percent softwood species processed.</p>
<p>(3) Softwood veneer dryer</p>	<p>Minimize fugitive emissions from the dryer doors and the green end</p>	<p>Following (and documenting that you are following) your plan for minimizing fugitive emissions.</p>

(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

Citation	Subject	Brief description	Applies to subpart DDDD
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes.
§63.2	Definitions	Definitions for part 63	Yes.

		standards	
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities	Prohibited activities; compliance date; circumvention, fragmentation	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes.
§63.6(a)	Applicability	GP apply unless compliance extension; GP apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources that Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	Yes.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes.
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources that Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (e.g., 3 years)	Yes.
§63.6(d)	[Reserved]		

§63.6(e) (1)–(2)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes.
§63.6(e) (3)	Startup, Shutdown, and Malfunction Plan (SSMP)	Requirement for SSM and SSMP; content of SSMP	Yes.
§63.6(f) (1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	Yes.
§63.6(f) (2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g) (1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h) (1)–(9)	Opacity/Visible Emission (VE) Standards	Requirements for opacity and visible emission standards	NA.
§63.6(i) (1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(i) (15)	[Reserved]		
§63.6(i) (16)	Compliance Extension	Compliance extension and Administrator's authority	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule	Yes.
§63.7(a) (1)–(2)	Performance Test Dates	Dates for conducting initial performance testing and other compliance demonstrations; must conduct 180 days after first subject to rule	Yes.
§63.7(a) (3)	Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b) (1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.

§63.7(b) (2)	Notification of Rescheduling	If have to reschedule performance test, must notify Administrator as soon as practicable	Yes.
§63.7(c)	Quality Assurance/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e) (1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM; not a violation to exceed standard during SSM	Yes.
§63.7(e) (2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e) (3)	Test Run Duration	Must have three test runs for at least the time specified in the relevant standard; compliance is based on arithmetic mean of three runs; specifies conditions when data from an additional test run can be used	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the notification of compliance status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.

§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance specifications in appendix B of part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring with Flares	Requirements for flares in §63.11 apply	NA.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with and good air pollution control practices	Yes.
§63.8(c)(1)(i)	Operation and Maintenance of CMS	Must maintain and operate CMS in accordance with §63.6(e)(1)	Yes.
§63.8(c)(1)(ii)	Spare Parts for CMS	Must maintain spare parts for routine CMS repairs	Yes.
§63.8(c)(1)(iii)	SSMP for CMS	Must develop and implement SSMP for CMS	Yes.
§63.8(c)(2)–(3)	Monitoring System Installation	Must install to get representative emission of parameter measurements; must verify operational status before or at performance test	Yes.
§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	CMS must be operating except during breakdown, out-of-control, repair,	Yes.

		maintenance, and high-level calibration drifts; COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period; CEMS must have a minimum of one cycle of operation for each successive 15-minute period	
§63.8(c) (5)	Continuous Opacity Monitoring System (COMS) Minimum Procedures	COMS minimum procedures	NA.
§63.8(c) (6)–(8)	CMS Requirements	Zero and high-level calibration check requirements; out-of-control periods	Yes.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years. Keep old versions for 5 years after revisions	Yes.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes.
§63.8(f) (1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes.
§63.8(f) (6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	Yes.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that can't be used in average; rounding of data	Yes.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b) (1)–(2)	Initial Notifications	Submit notification 120 days after effective date; contents	Yes.

		of notification	
§63.9(b)(3)	[Reserved]		
§63.9(b)(4)–(5)	Initial Notifications	Submit notification 120 days after effective date; notification of intent to construct/reconstruct; notification of commencement of construct/reconstruct; notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology/lowest achievable emission rate	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify EPA Administrator 60 days prior	Yes.
§63.9(f)	Notification of Visible Emissions/Opaicity Test	Notify EPA Administrator 30 days prior	No.
§63.9(g)	Additional Notifications When Using CMS	Notification of performance evaluation; notification using COMS data; notification that exceeded criterion for relative accuracy	Yes.
§63.9(h)(1)–(6)	Notification of Compliance Status	Contents; due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when	Yes.

		to submit to Federal vs. State authority; procedures for owners of more than one source	
§63.10 (b)(1)	Recordkeeping/Reporting	General Requirements; keep all records readily available; keep for 5 years	Yes.
§63.10 (b)(2)(i)-(iv)	Records Related to Startup, Shutdown, and Malfunction	Occurrence of each of operation (process equipment); occurrence of each malfunction of air pollution equipment; maintenance on air pollution control equipment; actions during startup, shutdown, and malfunction	Yes.
§63.10 (b)(2)(vi) and (x)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control	Yes.
§63.10 (b)(2) (vii)-(ix)	Records	Measurements to demonstrate compliance with compliance options and operating requirements; performance test, performance evaluation, and visible emission observation results; measurements to determine conditions of performance tests and performance evaluations	Yes.
§63.10 (b)(2) (xii)	Records	Records when under waiver	Yes.
§63.10 (b)(2) (xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10 (b)(2) (xiv)	Records	All documentation supporting initial notification and notification of compliance status	Yes.
§63.10 (b)(3)	Records	Applicability determinations	Yes.
§63.10 (c)(1)-(6), (9)-(15)	Records	Additional records for CMS	Yes.

§63.10 (c)(7)– (8)	Records	Records of excess emissions and parameter monitoring exceedances for CMS	No.
§63.10 (d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10 (d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10 (d)(3)	Reporting Opacity or VE Observations	What to report and when	NA.
§63.10 (d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10 (d)(5)	Startup, Shutdown, and Malfunction Reports	Contents and submission	Yes.
§63.10 (e)(1)– (2)	Additional CMS Reports	Must report results for each CEM on a unit; written copy of performance evaluation; 3 copies of COMS performance evaluation	Yes.
§63.10 (e)(3)	Reports	Excess emission reports	No.
§63.10 (e)(4)	Reporting COMS data	Must submit COMS data with performance test data	NA.
§63.10 (f)	Waiver for Recordkeeping/Reporting	Procedures for EPA Administrator to waive	Yes.
§63.11	Flares	Requirements for flares	NA.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are send	Yes.
§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

Appendix A to Subpart DDDD of Part 63—Alternative Procedure To Determine Capture Efficiency From Enclosures Around Hot Presses in the Plywood and Composite Wood Products Industry Using Sulfur Hexafluoride Tracer Gas

1.0 Scope and Application

This procedure has been developed specifically for the rule for the plywood and composite wood products (PCWP) industry and is used to determine the capture efficiency of a partial hot press enclosure in that industry. This procedure is applicable for the determination of capture efficiency for enclosures around hot presses and is an alternative to the construction of temporary total enclosures (TTE). Sulfur hexafluoride (SF₆) is used as a tracer gas (other tracer gases may be used if approved by the EPA Administrator). This gas is not indigenous to the ambient atmosphere and is nonreactive.

This procedure uses infrared spectrometry (IR) as the analytical technique. When the infrared spectrometer used is a Fourier-Transform Infrared spectrometer (FTIR), an alternate instrument calibration procedure may be used; the alternate calibration procedure is the calibration transfer standard (CTS) procedure of EPA Method 320 (appendix A to 40 CFR part 63). Other analytical techniques which are capable of equivalent Method Performance (Section 13.0) also may be used. Specifically, gas chromatography with electron capture detection (GC/ECD) is an applicable technique for analysis of SF₆.

2.0 Summary of Method

A constant mass flow rate of SF₆ tracer gas is released through manifolds at multiple locations within the enclosure to mimic the release of hazardous air pollutants during the press process. This test method requires a minimum of three SF₆ injection points (two at the press unloader and one at the press) and provides details about considerations for locating the injection points. A GC/ECD is used to measure the concentration of SF₆ at the inlet duct to the control device (outlet duct from enclosure).

Simultaneously, EPA Method 2 (appendix A to 40 CFR part 60) is used to measure the flow rate at the inlet duct to the control device. The concentration and flow rate measurements are used to calculate the mass emission rate of SF₆ at the control device inlet. Through calculation of the mass of SF₆ released through the manifolds and the mass of SF₆ measured at the inlet to the control device, the capture efficiency of the enclosure is calculated.

In addition, optional samples of the ambient air may be taken at locations around the perimeter of the enclosure to quantify the ambient concentration of SF₆ and to identify those areas of the enclosure that may be performing less efficiently; these samples would be taken using disposable syringes and would be analyzed using a GC/ECD.

Finally, in addition to the requirements specified in this procedure, the data quality objectives (DQO) or lower confidence limit (LCL) criteria specified in appendix A to 40 CFR part 63, subpart KK, Data Quality Objective and Lower Confidence Limit Approaches for Alternative Capture Efficiency Protocols and Test Methods, must also be satisfied. A minimum of three test runs are required for this procedure; however, additional test runs may be required based on the results of the DQO or LCL analysis.

3.0 Definitions

3.1 Capture efficiency (CE). The weight per unit time of SF₆ entering the control device divided by the weight per unit time of SF₆ released through manifolds at multiple locations within the enclosure.

3.2 Control device (CD). The equipment used to reduce, by destruction or removal, press exhaust air pollutants prior to discharge to the ambient air.

3.3 Control/destruction efficiency (DE). The volatile organic compound or HAP removal efficiency of the control device.

3.4 Data Quality Objective (DQO) Approach. A statistical procedure to determine the precision of the data from a test series and to qualify the data in the determination of capture efficiency for compliance purposes. If the results of the DQO analysis of the initial three test runs do not satisfy the DQO criterion, the LCL approach can be used or additional test runs must be conducted. If additional test runs are conducted, then the DQO or LCL analysis is conducted using the data from both the initial test runs and all additional test runs.

3.5 Lower Confidence Limit (LCL) Approach. An alternative statistical procedure that can be used to qualify data in the determination of capture efficiency for compliance purposes. If the results of the LCL approach produce a CE that is too low for demonstrating compliance, then additional test runs must be conducted until the LCL or DQO is met. As with the DQO, data from all valid test runs must be used in the calculation.

3.6 Minimum Measurement Level (MML). The minimum tracer gas concentration expected to be measured during the test series. This value is selected by the tester based on the capabilities of the IR spectrometer (or GC/ECD) and the other known or measured parameters of the hot press enclosure to be tested. The selected MML must be above the low-level calibration standard and preferably below the mid-level calibration standard.

3.7 Method 204. The U.S. EPA Method 204, "Criteria For and Verification of a Permanent or Temporary Total Enclosure" (40 CFR part 51, appendix M).

3.8 Method 205. The U.S. EPA Method 205, "Verification of Gas Dilution Systems for Field Instrument Calibrations" (40 CFR part 51, appendix M).

3.9 Method 320. The U.S. EPA Method 320, "Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy" (40 CFR part 63, appendix A).

3.10 Overall capture and control efficiency (CCE). The collection and control/destruction efficiency of both the PPE and CD combined. The CCE is calculated as the product of the CE and DE.

3.11 Partial press enclosure (PPE). The physical barrier that "partially" encloses the press equipment, captures a significant amount of the associated emissions, and transports those emissions to the CD.

3.12 Test series. A minimum of three test runs or, when more than three runs are conducted, all of the test runs conducted.

4.0 Interferences

There are no known interferences.

5.0 Safety

Sulfur hexafluoride is a colorless, odorless, nonflammable liquefied gas. It is stable and nonreactive and, because it is noncorrosive, most structural materials are compatible with it. The Occupational Safety and Health Administration Permissible Emission Limit-Time Weighted Average (PEL-TWA) and Threshold Limit Value-Time Weighted Average (TLV-TWA) concentrations are 1,000 parts per million. Sulfur hexafluoride is an asphyxiant. Exposure to an oxygen-deficient atmosphere (less than 19.5 percent oxygen) may cause dizziness, drowsiness, nausea, vomiting, excess salivation, diminished mental alertness, loss of consciousness, and death. Exposure to atmospheres containing less than 12 percent oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help themselves. Contact with liquid or cold vapor may cause frostbite. Avoid breathing sulfur hexafluoride gas. Self-contained breathing apparatus may be required by rescue workers. Sulfur hexafluoride is not listed as a carcinogen or a potential carcinogen.

6.0 Equipment and Supplies

This method requires equipment and supplies for: (a) the injection of tracer gas into the enclosure, (b) the measurement of the tracer gas concentration in the exhaust gas entering the control device, and (c) the measurement of the volumetric flow rate of the exhaust gas entering the control device. In addition, the requisite equipment needed for EPA Methods 1–4 in appendix A to 40 CFR part 60 will be required. Equipment and supplies for optional ambient air sampling are discussed in Section 8.6.

6.1 Tracer Gas Injection.

6.1.1 Manifolds. This method requires the use of tracer gas supply cylinder(s) along with the appropriate flow control elements. Figure 1 shows a schematic drawing of the injection system showing potential locations for the tracer gas manifolds. Figure 2 shows a schematic drawing of the recommended configuration of the injection manifold. Three tracer gas discharge manifolds are required at a minimum.

6.1.2 Flow Control Meter. Flow control and measurement meter for measuring the quantity of tracer gas injected. A mass flow, volumetric flow, or critical orifice control meter can be used for this method. The meter must be accurate to within ± 5 percent at the flow rate used. This means that the flow meter must be calibrated against a primary standard for flow measurement at the appropriate flow rate.

6.2 Measurement of Tracer Gas Concentration.

6.2.1 Sampling Probes. Use Pyrex or stainless steel sampling probes of sufficient length to reach the traverse points calculated according to EPA Method 1 (appendix A to 40 CFR part 60).

6.2.2 Sampling Line. Use a heated Teflon sampling line to transport the sample to the analytical instrument.

6.2.3 Sampling Pump. Use a sampling pump capable of extracting sufficient sample from the duct and transporting to the analytical instrument.

6.2.4 Sample Conditioning System. Use a particulate filter sufficient to protect the sampling pump and analytical instrument. At the discretion of the tester and depending on the equipment used and the moisture content of the exhaust gas, it may be necessary to further condition the sample by removing moisture using a condenser.

6.2.5 Analytical Instrument. Use one of the following analytical instruments.

6.2.5.1 Spectrometer. Use an infrared spectrometer designed to measuring SF₆ tracer gas and capable of meeting or exceeding the specifications of this procedure. An FTIR meeting the specifications of Method 320 in appendix A to 40 CFR part 63 may be used.

6.2.5.2 GC/ECD. Use a GC/ECD designed to measure SF₆ tracer gas and capable of meeting or exceeding the specifications of this procedure.

6.2.6 Recorder. At a minimum, use a recorder with linear strip chart. An automated data acquisition system (DAS) is recommended.

6.3 Exhaust Gas Flow Rate Measurement. Use equipment specified for EPA Methods 2, 3, and 4 in appendix A to 40 CFR part 60 for measuring flow rate of exhaust gas at the inlet to the control device.

7.0 Reagents and Standards

7.1 Tracer Gas. Use SF₆ as the tracer gas. The manufacturer of the SF₆ tracer gas should provide a recommended shelf life for the tracer gas cylinder over which the concentration does not change more than ±2 percent from the certified value. A gas mixture of SF₆ diluted with nitrogen should be used; based on experience and calculations, pure SF₆ gas is not necessary to conduct tracer gas testing. Select a concentration and flow rate that is appropriate for the analytical instrument's detection limit, the MML, and the exhaust gas flow rate from the enclosure (see section 8.1.1). You may use a tracer gas other than SF₆ with the prior approval of the EPA Administrator. If you use an approved tracer gas other than SF₆, all references to SF₆ in this protocol instead refer to the approved tracer gas.

7.2 Calibration Gases. The SF₆ calibration gases required will be dependent on the selected MML and the appropriate span selected for the test. Commercial cylinder gases certified by the manufacturer to be accurate to within 1 percent of the certified label value are preferable, although cylinder gases certified by the manufacturer to 2 percent accuracy are allowed. Additionally, the manufacturer of the SF₆ calibration gases should provide a recommended shelf life for each calibration gas cylinder over which the concentration does not change more than ±2 percent from the certified value. Another option allowed by this method is for the tester to obtain high concentration certified cylinder gases and then use a dilution system meeting the requirements of EPA Method 205, 40 CFR part 51, appendix M, to make multi-level calibration gas standards. Low-level, mid-level, and high-level calibration gases will be required. The MML must be above the low-level standard, the high-level standard must be no more than four times the low-level standard, and the mid-level standard must be approximately halfway between the high- and low-level standards. See section 12.1 for an example calculation of this procedure.

Note: If using an FTIR as the analytical instrument, the tester has the option of following the CTS procedures of Method 320 in appendix A to 40 CFR part 63; the calibration standards (and procedures) specified in Method 320 may be used in lieu of the calibration standards and procedures in this protocol.

7.2.1 Zero Gas. High purity nitrogen.

7.2.2 Low-Level Calibration Gas. An SF₆ calibration gas in nitrogen with a concentration equivalent to 20 to 30 percent of the applicable span value.

7.2.3 Mid-Level Calibration Gas. An SF₆ calibration gas in nitrogen with a concentration equivalent to 45 to 55 percent of the applicable span value.

7.2.4 High-Level Calibration Gas. An SF₆ calibration gas in nitrogen with a concentration equivalent to 80 to 90 percent of the applicable span value.

8.0 Sample Collection, Preservation, Storage, and Transport

8.1 Test Design.

8.1.1 Determination of Minimum Tracer Gas Flow Rate.

8.1.1.1 Determine (via design calculations or measurements) the approximate flow rate of the exhaust gas through the enclosure, actual cubic feet per minute (acfm).

8.1.1.2 Calculate the minimum tracer gas injection rate necessary to assure a detectable SF₆ concentration at the exhaust gas measurement point (see section 12.1 for calculation).

8.1.1.3 Select a flow meter for the injection system with an operating range appropriate for the injection rate selected.

8.1.2 Determination of the Approximate Time to Reach Equilibrium.

8.1.2.1 Determine the volume of the enclosure.

8.1.2.2 Calculate the air changes per minute of the enclosure by dividing the approximate exhaust flow rate (8.1.1.1 above) by the enclosed volume (8.1.2.1 above).

8.1.2.3 Calculate the time at which the tracer concentration in the enclosure will achieve approximate equilibrium. Divide 3 by the air changes per minute (8.1.2.2 above) to establish this time. This is the approximate length of time for the system to come to equilibrium. Concentration equilibrium occurs when the tracer concentration in the enclosure stops changing as a function of time for a constant tracer release rate. Because the press is continuously cycling, equilibrium may be exhibited by a repeating, but stable, cyclic pattern rather than a single constant concentration value. Assure sufficient tracer gas is available to allow the system to come to equilibrium, and to sample for a minimum of 20 minutes and repeat the procedure for a minimum of three test runs. Additional test runs may be required based on the results of the DQO and LCL analyses described in 40 CFR part 63, subpart KK, appendix A.

8.1.3 Location of Injection Points. This method requires a minimum of three tracer gas injection points. The injection points should be located within leak prone, volatile organic compound/hazardous air pollutant (VOC/HAP) producing areas around the press, or horizontally within 12 inches of the defined equipment. One potential configuration of the injection points is depicted in Figure 1. The effect of wind, exfiltration through the building envelope, and air flowing through open building doors should be considered when locating tracer gas injection points within the enclosure. The injection points should also be located at a vertical elevation equal to the VOC/HAP generating zones. The injection points should not be located beneath obstructions that would prevent a natural dispersion of the gas. Document the selected injection points in a drawing(s).

8.1.4 Location of Flow Measurement and Tracer Sampling. Accurate CD inlet gas flow rate measurements are critical to the success of this procedure. Select a measurement location meeting the criteria of EPA Method 1 (40 CFR part 60, appendix A), Sampling and Velocity Traverses for Stationary Sources. Also, when selecting the measurement location, consider whether stratification of the tracer gas is likely at the location (e.g., do not select a location immediately after a point of air in-leakage to the duct).

8.2 Tracer Gas Release. Release the tracer gas at a calculated flow rate (see section 12.1 for calculation) through a minimum of three injection manifolds located as described above in 8.1.3. The tracer gas delivery lines must be routed into the enclosure and attached to the manifolds without violating the integrity of the enclosure.

8.3 Pretest Measurements.

8.3.1 Location of Sampling Point(s). If stratification is not suspected at the measurement location, select a single sample point located at the centroid of the CD inlet duct or at a point no closer to the CD inlet duct walls than 1 meter. If stratification is suspected, establish a "measurement line" that passes through the centroidal area and in the direction of any expected stratification. Locate three traverse points at 16.7, 50.0 and 83.3 percent of the measurement line and sample from each of these three points during each run, or follow the procedure in section 8.3.2 to verify whether stratification does or does not exist.

8.3.2 Stratification Verification. The presence or absence of stratification can be verified by using the following procedure. While the facility is operating normally, initiate tracer gas release into the enclosure. For rectangular ducts, locate at least nine sample points in the cross section such that the sample points are the centroids of similarly-shaped, equal area divisions of the cross section. Measure the tracer gas concentration at each point. Calculate the mean value for all sample points. For circular ducts, conduct a 12-point traverse (i.e., six points on each of the two perpendicular diameters) locating the sample points as described in 40 CFR part 60, appendix A, Method 1. Perform the measurements and calculations as described above. Determine if the mean pollutant concentration is more than 10 percent different from any single point. If so, the cross section is considered to be stratified, and the tester may not use a single sample point location, but must use the three traverse points at 16.7, 50.0, and 83.3 percent of the entire measurement line. Other traverse points may be selected, provided that they can be shown to the satisfaction of the Administrator to provide a representative sample over the stack or duct cross section.

8.4 CD Inlet Gas Flow Rate Measurements. The procedures of EPA Methods 1-4 (40 CFR part 60, appendix A) are used to determine the CD inlet gas flow rate. Molecular weight (Method 3) and moisture (Method 4) determinations are only required once for each test series. However, if the test series is not completed within 24 hours, then the molecular weight and moisture measurements should be repeated daily. As a minimum, velocity measurements are conducted according to the procedures of Methods 1 and 2 before and after each test run, as close to the start and end of the run as practicable. A velocity measurement between two runs satisfies both the criterion of "after" the run just completed and "before" the run to be initiated. Accurate exhaust gas flow rate measurements are critical to the success of this procedure. If significant temporal variations of flow rate are anticipated during the test run under normal process operating conditions, take appropriate steps to accurately measure the flow rate during the test. Examples of steps that might be taken include: (1) conducting additional velocity traverses during the test run; or (2) continuously monitoring a single point of average velocity during the run and using these data, in conjunction with the pre- and post-test traverses, to calculate an average velocity for the test run.

8.5 Tracer Gas Measurement Procedure.

8.5.1 Calibration Error Test. Immediately prior to the emission test (within 2 hours of the start of the test), introduce zero gas and high-level calibration gas at the calibration valve assembly. Zero and calibrate the analyzer according to the manufacturer's procedures using, respectively, nitrogen and the calibration gases. Calculate the predicted response for the low-level and mid-level gases based on a linear response line between the zero and high-level response. Then introduce the low-level and mid-level calibration gases successively to the measurement system. Record the analyzer responses for the low-level and mid-level calibration gases and determine the differences between the measurement system responses and the predicted responses using the equation in section 12.3. These differences must be less than 5 percent of the respective calibration gas value. If not, the measurement system must be replaced or repaired prior to testing. No adjustments to the measurement system shall be conducted after the calibration and before the drift determination (section 8.5.4). If adjustments are necessary before the completion of the test series, perform the drift checks prior to the required adjustments and repeat the calibration following the adjustments. If multiple electronic ranges are to be used, each additional range must be checked with a mid-level calibration gas to verify the multiplication factor.

Note: If using an FTIR for the analytical instrument, you may choose to follow the pretest preparation, evaluation, and calibration procedures of Method 320 (section 8.0) (40 CFR part 63, appendix A) in lieu of the above procedure.

8.5.2 Response Time Test. Conduct this test once prior to each test series. Introduce zero gas into the measurement system at the calibration valve assembly. When the system output has stabilized, switch quickly to the high-level calibration gas. Record the time from the concentration change to the measurement system response equivalent to 95 percent of the step change. Repeat the test three times and average the results.

8.5.3 SF₆ Measurement. Sampling of the enclosure exhaust gas at the inlet to the CD should begin at the onset of tracer gas release. If necessary, adjust the tracer gas injection rate such that the measured tracer gas concentration at the CD inlet is within the spectrometer's calibration range (i.e., between the MML and the span value). Once the tracer gas concentration reaches equilibrium, the SF₆ concentration should be measured using the infrared spectrometer continuously for at least 20 minutes per run. Continuously record (i.e., record at least once per minute) the concentration. Conduct at least three test runs. On the recording chart, in the data acquisition system, or in a log book, make a note of periods of process interruption or cyclic operation such as the cycles of the hot press operation. Table 1 to this appendix summarizes the physical measurements required for the enclosure testing.

Note: If a GC/ECD is used as the analytical instrument, a continuous record (at least once per minute) likely will not be possible; make a minimum of five injections during each test run. Also, the minimum test run duration criterion of 20 minutes applies.

8.5.4 Drift Determination. Immediately following the completion of the test run, reintroduce the zero and mid-level calibration gases, one at a time, to the measurement system at the calibration valve assembly. (Make no adjustments to the measurement system until both the zero and calibration drift checks are made.) Record the analyzer responses for the zero and mid-level calibration gases and determine the difference between the instrument responses for each gas prior to and after the emission test run using the equation in section 12.4. If the drift values exceed the specified limits (section 13), invalidate the test results preceding the check and repeat the test following corrections to the measurement system. Alternatively, recalibrate the test measurement system as in section 8.5.1 and report the results using both sets of calibration data (i.e., data determined prior to the test period and data determined following the test period). Note: If using an FTIR for the analytical instrument, you may choose to follow the post-test calibration procedures of Method 320 in appendix A to 40 CFR part 63 (section 8.11.2) in lieu of the above procedures.

8.6 Ambient Air Sampling (Optional). Sampling the ambient air surrounding the enclosure is optional. However, taking these samples during the capture efficiency testing will identify those areas of the enclosure that may be performing less efficiently.

8.6.1 Location of Ambient Samples Outside the Enclosure (Optional). In selecting the sampling locations for collecting samples of the ambient air surrounding the enclosure, consider potential leak points, the direction of the release, and laminar flow characteristics in the area surrounding the enclosure. Samples should be collected from all sides of the enclosure, downstream in the prevailing room air flow, and in the operating personnel occupancy areas.

8.6.2 Collection of Ambient Samples (Optional). During the tracer gas release, collect ambient samples from the area surrounding the enclosure perimeter at predetermined location using disposable syringes or some other type of containers that are non-absorbent, inert, and that have low permeability (i.e., polyvinyl fluoride film or polyester film sample bags or polyethylene, polypropylene, nylon or glass bottles). The use of disposable syringes allows samples to be injected directly into a gas chromatograph. Concentration measurements taken around the perimeter of the enclosure provide evidence of capture performance and will assist in the identification of those areas of the enclosure that are performing less efficiently.

8.6.3 Analysis and Storage of Ambient Samples (Optional). Analyze the ambient samples using an analytical instrument calibrated and operated according to the procedures in this appendix or ASTM E 260 and ASTM E 697. Samples may be analyzed immediately after a sample is taken, or they may be stored for future analysis. Experience has shown no degradation of concentration in polypropylene syringes when stored for several months as long as the needle or syringe is plugged. Polypropylene syringes should be discarded after one use to eliminate the possibility of cross contamination of samples.

9.0 Quality Control

9.1 Sampling, System Leak Check. A sampling system leak check should be conducted prior to and after each test run to ensure the integrity of the sampling system.

9.2 Zero and Calibration Drift Tests.

Section	Quality control measure	Effect
8.5.4	Zero and calibration drift tests	Ensures that bias introduced by drift in the measurement system output during the run is no greater than 3 percent of span.

10.0 Calibration and Standardization

10.1 Control Device Inlet Air Flow Rate Measurement Equipment. Follow the equipment calibration requirements specified in Methods 2, 3, and 4 (appendix A to 40 CFR part 60) for measuring the velocity, molecular weight, and moisture of the control device inlet air.

10.2 Tracer Gas Injection Rate. A dry gas volume flow meter, mass flow meter, or orifice can be used to measure the tracer gas injection flow rate. The selected flow measurement device must have an accuracy of greater than ±5 percent at the field operating range. Prior to the test, verify the calibration of the selected flow measurement device using either a wet test meter, spirometer, or

liquid displacement meter as the calibration device. Select a minimum of two flow rates to bracket the expected field operating range of the flow meter. Conduct three calibration runs at each of the two selected flow rates. For each run, note the exact quantity of gas as determined by the calibration standard and the gas volume indicated by the flow meter. For each flow rate, calculate the average percent difference of the indicated flow compared to the calibration standard.

10.3 Spectrometer. Follow the calibration requirements specified by the equipment manufacturer for infrared spectrometer measurements and conduct the pretest calibration error test specified in section 8.5.1. Note: if using an FTIR analytical instrument see Method 320, section 10 (appendix A to 40 CFR part 63).

10.4 Gas Chromatograph. Follow the pre-test calibration requirements specified in section 8.5.1.

10.5 Gas Chromatograph for Ambient Sampling (Optional). For the optional ambient sampling, follow the calibration requirements specified in section 8.5.1 or ASTM E 260 and E 697 and by the equipment manufacturer for gas chromatograph measurements.

11.0 Analytical Procedures

The sample collection and analysis are concurrent for this method (see section 8.0).

12.0 Calculations and Data Analysis

12.1 Estimate MML and Span. The MML is the minimum measurement level. The selection of this level is at the discretion of the tester. However, the MML must be higher than the low-level calibration standard, and the tester must be able to measure at this level with a precision of 10 percent. As an example, select the MML as 10 times the instrument's published detection limit. The detection limit of one instrument is 0.01 parts per million by volume (ppmv). Therefore, the MML would be 0.10 ppmv. Select the low-level calibration standard as 0.08 ppmv. The high-level standard would be four times the low-level standard or 0.32 ppmv. A reasonable mid-level standard would then be 0.20 ppmv (halfway between the low-level standard and the high-level standard). Finally, the span value would be approximately 0.40 ppmv (the high-level value is 80 percent of the span). In this example, the following MML, calibration standards, and span values would apply:

MML = 0.10 ppmv

Low-level standard = 0.08 ppmv

Mid-level standard = 0.20 ppmv

High-level standard = 0.32 ppmv

Span value = 0.40 ppmv

12.2 Estimate Tracer Gas Injection Rate for the Given Span. To estimate the minimum and maximum tracer gas injection rate, assume a worst case capture efficiency of 80 percent, and calculate the tracer gas flow rate based on known or measured parameters. To estimate the minimum tracer gas injection rate, assume that the MML concentration (10 times the IR detection limit in this example) is desired at the measurement location. The following equation can be used to estimate the minimum tracer gas injection rate:

$$((QT-MIN \times 0.8)/Q_E) \times (C_T + 100) \times 10^6 = MML$$

$$QT-MIN = 1.25 \times MML \times (Q_E/C_T) \times 10^{-4}$$

Where:

QT-MIN= minimum volumetric flow rate of tracer gas injected, standard cubic feet per minute (scfm);

Q_E= volumetric flow rate of exhaust gas, scfm;

C_T= Tracer gas (SF₆) concentration in gas blend, percent by volume;

MML = minimum measured level, ppmv = 10 × IR_{DL} (for this example);

IR_{DL} = IR detection limit, ppmv.

Standard conditions: 20 °C, 760 millimeters of mercury (mm Hg).

To estimate the maximum tracer gas injection rate, assume that the span value is desired at the measurement location. The following equation can be used to estimate the maximum tracer gas injection rate:

$$((QT-MAX \times 0.8) / Q_E) \times (C_T + 100) \times 10^6 = \text{span value}$$

$$QT-MAX = 1.25 \times \text{span value} \times (Q_E / C_T) \times 10^{-4}$$

Where:

QT-MAX = maximum volumetric flow rate of tracer gas injected, scfm;

Span value = instrument span value, ppmv.

The following example illustrates this calculation procedure:

Find the range of volumetric flow rate of tracer gas to be injected when the following parameters are known:

$Q_E = 60,000$ scfm (typical exhaust gas flow rate from an enclosure);

$C_T = 2$ percent SF_6 in nitrogen;

$IR_{DL} = 0.01$ ppmv (per manufacturer's specifications);

$MML = 10 \times IR_{DL} = 0.10$ ppmv;

Span value = 0.40 ppmv;

$Q_T = ?$

Minimum tracer gas volumetric flow rate:

$$QT-MIN = 1.25 \times MML \times (Q_E / C_T) \times 10^{-4}$$

$$QT-MIN = 1.25 \times 0.10 \times (60,000 / 2) \times 10^{-4} = 0.375 \text{ scfm}$$

Maximum tracer gas volumetric flow rate:

$$QT-MAX = 1.25 \times \text{span value} \times (Q_E / C_T) \times 10^{-4}$$

$$QT-MAX = 1.25 \times 0.40 \times (60,000 / 2) \times 10^{-4} = 1.5 \text{ scfm}$$

In this example, the estimated total volumetric flow rate of the two percent SF_6 tracer gas injected through the manifolds in the enclosure lies between 0.375 and 1.5 scfm.

12.3 Calibration Error. Calculate the calibration error for the low-level and mid-level calibration gases using the following equation:

$$\text{Err} = \frac{|C_{std} - C_{meas}|}{C_{std}} \times 100$$

Where:

Err = calibration error, percent;

C_{std} = low-level or mid-level calibration gas value, ppmv;

C_{meas} = measured response to low-level or mid-level concentration gas, ppmv.

12.4 Calibration Drift. Calculate the calibration drift for the zero and low-level calibration gases using the following equation:

$$D = \frac{C_{\text{initial}} - C_{\text{final}}}{C_{\text{span}}} \times 100$$

Where:

D = calibration drift, percent;

C_{initial} = low-level or mid-level calibration gas value measured before test run, ppmv;

C_{final} = low-level or mid-level calibration gas value measured after test run, ppmv;

C_{span} = span value, ppmv.

12.5 Calculate Capture Efficiency. The equation to calculate enclosure capture efficiency is provided below:

$$CE = \frac{SF6\text{-}CD + SF6\text{-}INJ}{SF6\text{-}INJ} \times 100$$

Where:

CE = capture efficiency;

SF6-CD = mass of SF₆ measured at the inlet to the CD;

SF6-INJ = mass of SF₆ injected from the tracer source into the enclosure.

Calculate the CE for each of the initial three test runs. Then follow the procedures outlined in section 12.6 to calculate the overall capture efficiency.

12.6 Calculate Overall Capture Efficiency. After calculating the capture efficiency for each of the initial three test runs, follow the procedures in 40 CFR part 63, subpart KK, appendix A, to determine if the results of the testing can be used in determining compliance with the requirements of the rule. There are two methods that can be used: the DQO and LCL methods. The DQO method is described in section 3 of 40 CFR part 63, subpart KK, appendix A, and provides a measure of the precision of the capture efficiency testing conducted. Section 3 of 40 CFR part 63, subpart KK, appendix A, provides an example calculation using results from a facility. If the DQO criteria are met using the first set of three test runs, then the facility can use the average capture efficiency of these test results to determine the capture efficiency of the enclosure. If the DQO criteria are not met, then the facility can conduct another set of three runs and run the DQO analysis again using the results from the six runs OR the facility can elect to use the LCL approach.

The LCL method is described in section 4 of 40 CFR part 63, subpart KK, appendix A, and provides sources that may be performing much better than their regulatory requirement, a screening option by which they can demonstrate compliance. The LCL approach compares the 80 percent lower confidence limit for the mean measured CE value to the applicable regulatory requirement. If the LCL capture efficiency is higher than the applicable limit, then the facility is in initial compliance and would use the LCL capture efficiency as the capture efficiency to determine compliance. If the LCL capture efficiency is lower than the applicable limit, then the facility must perform additional test runs and re-run the DQO or LCL analysis.

13.0 Method Performance

13.1 Measurement System Performance Specifications.

13.1.1 Zero Drift. Less than ±3 percent of the span value.

13.1.2 Calibration Drift. Less than ±3 percent of the span value.

13.1.3 Calibration Error. Less than ±5 percent of the calibration gas value.

13.2 Flow Measurement Specifications. The mass flow, volumetric flow, or critical orifice control meter used should have an accuracy of greater than ±5 percent at the flow rate used.

13.3 Calibration and Tracer Gas Specifications. The manufacturer of the calibration and tracer gases should provide a recommended shelf life for each calibration gas cylinder over which the concentration does not change more than ±2 percent from the certified value.

14.0 Pollution Prevention [Reserved]

15.0 Waste Management [Reserved]

16.0 References

1. 40 CFR part 60, appendix A, EPA Method 1—Sample and velocity traverses for stationary sources.
2. 40 CFR part 60, appendix A, EPA Method 2—Determination of stack gas velocity and volumetric flow rate.
3. 40 CFR part 60, appendix A, EPA Method 3—Gas analysis for the determination of dry molecular weight.
4. 40 CFR part 60, appendix A, EPA Method 4—Determination of moisture content in stack gases.
5. SEMI F15-93 Test Method for Enclosures Using Sulfur Hexafluoride Tracer Gas and Gas Chromatography.
6. Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, to EPA Regional Directors, Revised Capture Efficiency Guidance for Control of Volatile Organic Compound Emissions, February 7, 1995. (That memorandum contains an attached technical document from Candace Sorrell, Emission Monitoring and Analysis Division, "Guidelines for Determining Capture Efficiency," January 9, 1994).
7. Technical Systems Audit of Testing at Plant "C," EPA-454/R-00-26, May 2000.
8. Material Safety Data Sheet for SF₆ Air Products and Chemicals, Inc. Website: www3.airproducts.com. October 2001.

17.0 Tables, Diagrams, Flowcharts, and Validation Data

Table 1 to Appendix A to Subpart DDDD of 40 CFR Part 63—Summary of Critical Physical Measurements for Enclosure Testing

Measurement	Measurement instrumentation	Measurement frequency	Measurement site
Tracer gas injection rate	Mass flow meter, volumetric flow meter or critical orifice	Continuous	Injection manifolds (cylinder gas).
Tracer gas concentration at control device inlet	Infrared Spectrometer or GC/ECD	Continuous (at least one reading per minute) for a minimum of 20 minutes	Inlet duct to the control device (outlet duct of enclosure).
Volumetric air flow rate	EPA Methods 1, 2, 3, 4 (40 CFR part 60, appendix A) <ul style="list-style-type: none"> • Velocity sensor (Manometer/Pitot tube) • Thermocouple 	Each test run for velocity (minimum); Daily for moisture and molecular weight	Inlet duct to the control device (outlet duct of enclosure).
	<ul style="list-style-type: none"> • Midget Impinger sampler 		
	<ul style="list-style-type: none"> • Orsat or Fyrite 		

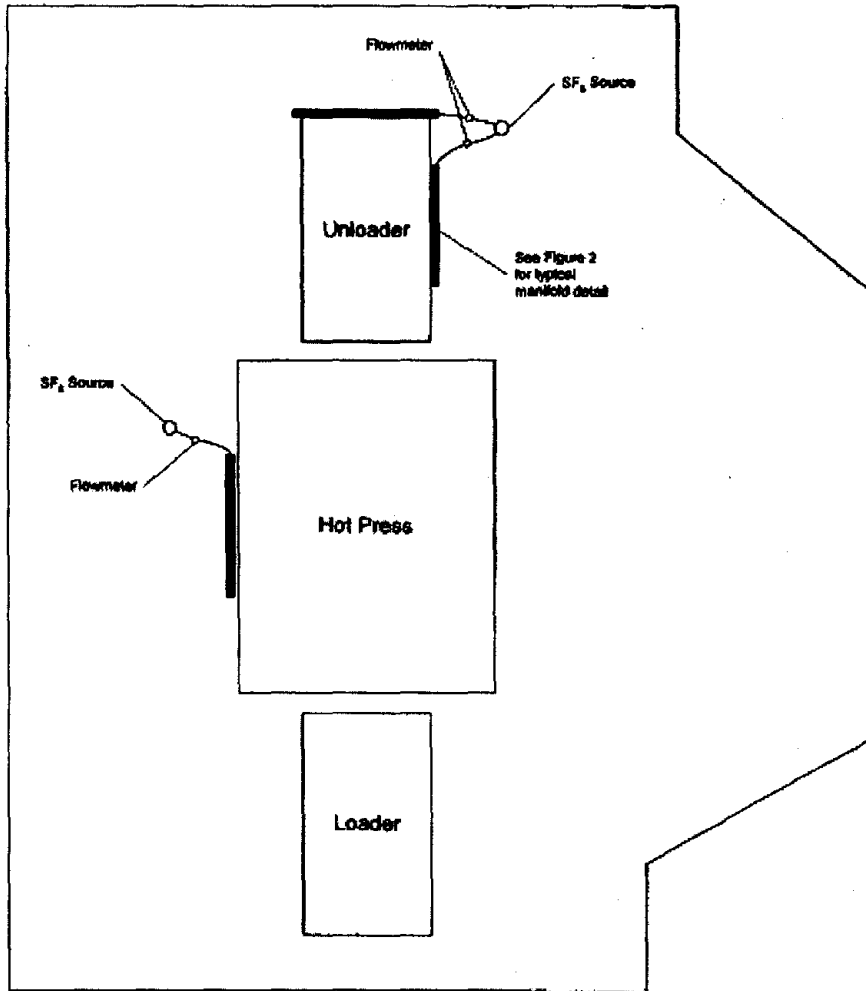


Figure 1. Plan view schematic of hot press and enclosure showing SF₆ manifold locations.

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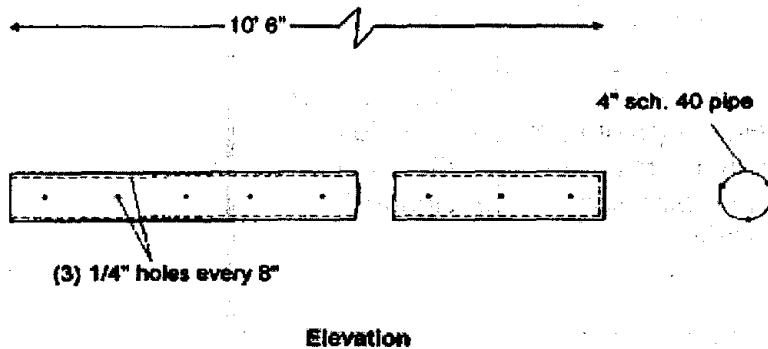


Figure 2. Schematic detail for manifold system for SF₆ injection.

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[69 FR 46011, July 30, 2004, as amended at 71 FR 8375, Feb. 16, 2006]

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APPENDIX B

Routine Control Device Maintenance for the Dryer RTOs and the Press RTO/TCO

ROUTINE CONTROL DEVICE MAINTENANCE EXEMPTION (RCDME) – 40 CFR63.2251

Georgia-Pacific Wood Products LLC – Fordyce, Arkansas, OSB Facility

Routine Control Device Maintenance Exemption

40 CFR Part 63 Subpart DDDD provisions allow a facility to request a routine control device maintenance exemption (RCDME) in recognition of the level of maintenance required by MACT control devices. The RCDME provision details are described below:

- The exemption must not exceed annual process operating uptime percentages specified for differing process units:
 - 0.5 percent of the uptime for RTO/RCO controlling veneer dryers emissions and hot presses,
 - 3 percent of the uptime for RTO controlling emissions from OSB flake dryers.
- The compliance options and operating requirements do not apply during times when control device maintenance covered under the routine control device maintenance exemption is performed.
- Emissions must be minimized to the greatest extent possible during these times.
- To the extent practical, startup and shutdown of emission control systems must be scheduled during times when process equipment is shut down.

Normal Process Shutdown Schedule

The facility normally schedules at least one major shutdown during Christmas lasting 2 to 3 days.

Every two weeks, and as allowed by the Title V Operating permit, two flake dryers and one RTO are taken off line for preventive maintenance, including bakeout and/or washout of the RTO. The facility operates two RTOs to control emissions from five flake dryers. The system has the flexibility of routing emissions from three dryers to one RTO while the other RTO is down for maintenance and the emissions from the other two dryers are vented to atmosphere.

Maintenance Exemption Related Activities

Safety checks, preventative maintenance, and internal inspections are required by insurance underwriters, recommended by RTO/RCO manufacturers, and indicated as necessary based on operational experience. The timing and duration of bakeouts, washouts, replacement of media, and replacement/repair of corroded parts will depend on particulate loading to the system, frequency of maintenance activities, age of the equipment, etc.

Particulate that penetrates deeper into the media bed will tend to burn off. However, chemically reactive particles can cause problems even when they penetrate deep into the media. A portion of the particulate that enters the RTO/RCO will collect on the cold face of the media bed. Depending on the design of the media, the particulate build up can rapidly lead to plugging of the media bed. Plugging causes several significant problems. Blockage of airflow results in a rise in pressure drop, forcing the induced draft

fan to work harder and consume more electricity. The only remediation solution for these symptoms is wash-out and/or bake-out of the media bed. The frequency of wash-out and bake-out procedures typically increases until the only viable solution is a complete media change out. Based on our historical experience with these systems, we intend to implement the following schedule to insure proper operation of the control device:

1. OSB FLAKE DRYERS / RTO SYSTEM

Maintenance Activity	Frequency	Reason
Preventive Maintenance and Internal Inspection	Annual	An annual safety check is recommended by the RTO/RCO manufacturer and by Factory Mutual, and supported based on company's operating experience. This activity involves checking various components – i.e., valves, structure, burners, natural gas train, etc. This activity requires 48 hours including cooling and heating. However, issues like media replacement, replacement of corroded components, metal support structure repair or replacement, etc., may take more than 48 hours but less than the 0.5% of the uptime allocated for RCDME.
Bakeout	Each Unit Once every 28 Days	The facility may perform scheduled, routine bakeouts of each RTO once every 28 days. A bakeout operation holds the RTO chamber in outlet mode and raises the temperature of the bottom of the bed above 600°F. The bakeout is required to remove organic materials from the chamber and typically lasts 8 hours per occurrence.
Washout	Once every 2 weeks	The facility will perform scheduled washout, every 2 weeks per unit. A washout is conducted at ambient conditions and is required to remove inorganic and burned out materials accumulated in the bed saddles or media. A washout typically lasts 24 hours. Middle of bed washout is substituted for a washout periodically and is conducted by cooling the bottom half of the saddles to below 125°F by holding each chamber as an inlet until this temperature is reached. Then water is turned on in the middle of the bed through lances that are in place.
Media Replacement	Varies (One to Two years)	Replacement of standard media in RTOs controlling flake dryers

		emissions is anticipated every 2 years. Removal of old media and placement of the new media may take up to 96 hours.
Replacement of Corroded Parts	Once Per Year	Natural Gas trains, valves and regulators tend to corrode due to moisture in the natural gas pipeline and/or exposure to the weather. Visual inspections of the natural gas distribution system are conducted every year and addressed during the annual Preventive Maintenance and Internal Inspection described above.

2. OSB HOT PRESS / RTO-RCO SYSTEM

Maintenance Activity	Frequency	Reason
Preventive Maintenance and Internal Inspection	Annual	An annual safety check is recommended by the RTO/RCO manufacturer, by Factory Mutual, and supported based on company's operating experience. This activity involves checking various components – i.e., valves, structure, burners, natural gas train, etc. This activity requires approximately 48 hours including cool-down and heat-up. However, issues like media replacement, replacement of corroded components, metal support structure repair or replacement, etc., may take more than 48 hours.
Bakeout	As needed by observed particulate matter build up.	The facility may perform scheduled, routine bakeouts of the RTO-RCO, as indicated by buildup of material on the media. A bakeout operation holds the RTO/RCO chamber in outlet mode and raises the temperature of the cold face to 600°F. The bakeout is required to remove organic materials from the chamber and typically lasts 8 hours per occurrence.
Washout	As needed by observed build up.	The facility may perform routine washouts of the RTO/RCO, as indicated by buildup of material on the media. A washout is conducted at ambient conditions and is required to remove inorganic and burned out materials accumulated in the bed saddles or media. A washout typically lasts 24 hours including cool-down and heat-up of the unit.
Catalytic Media Sampling	Once per year	PCWP MACT requires sampling of catalytic media to check the activity

		level. This activity requires 24 hours to conduct, including cool-down and heat-up of the unit.
Media Replacement	Every 7 years for standard media and 3 years for catalytic media.	Replacement of standard media in an RTO/RCO controlling OSB press emissions is anticipated every 7 years. Catalytic media will need replacement about every 3 years. Removal of old media and placement of the new media may take up to 72 hours.
Replacement/Repair of Corroded Parts	Once per year	Natural Gas trains, valves and regulators tend to corrode due to moisture in the natural gas pipeline and/or exposure to the weather. Visual inspections of the natural gas distribution system are conducted every year and addressed during the annual Preventive Maintenance and internal inspection

Quarterly safety checks are of very short duration and will be scheduled to coincide with the bi-weekly RTO/Dryers preventative maintenance period in order to minimize emissions during the RTO/RCO outage. The annual preventive maintenance and internal inspection and catalytic media sampling (if applicable) will be scheduled to coincide with a major holiday process shutdown in order to minimize emissions. Should additional activities requiring RTO/RCO outage beyond the duration of the annual process shutdown be indicated including bakeout, washout, media replacement, and/or replacement/repair of corroded parts, these will be conducted as RCDME activities in order to minimize emissions that would occur as a result of the need for a subsequent, separate outage. RCDME outages will be tracked in order to assure that they do not exceed the allowed 3% for RTO/Dryers and 0.5% for hot press annual process unit operating uptime.

CERTIFICATE OF SERVICE

I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to Georgia-Pacific Wood Products, LLC Fordyce OSB, PO Box 1095, Fordyce, AR, 71742, on this 12th day of December, 2008.



Cynthia Hook, AAI, Air Division

