

# General Air Quality Permit for New or Modified True Minor Source Sawmill Facilities

Last Modified: July 2, 2014 Version 1.0

# Information about this General Permit:

#### Applicability

Pursuant to the provisions of the Clean Air Act (CAA), Subchapter I, part D and 40 CFR part 49, subpart C, this permit authorizes the construction or modification and the operation of the autobody repair and miscellaneous surface coating operation for which a reviewing authority issues an Approval of the Request for Coverage (permitted source).

#### Eligibility

To be eligible for coverage under this general permit, the permitted source must qualify as a true minor source as defined in 40 CFR 49.152.

#### Request for Coverage

Requirements for submitting a Request for Coverage are contained in Section 7 of this general permit.

#### Incorporation of Documents

The information contained in each reviewing authority's Approval of the Request of Coverage is hereby incorporated into this general permit.

#### Termination

Section 6 of this general permit addresses a reviewing authority's ability to revise, revoke and reissue, or terminate this general permit. It also addresses the reviewing authority's ability to terminate an individual permitted source's Approval of the Request for Coverage under this general permit.

#### Definitions

The terms used herein shall have the meaning as defined in 40 CFR 49.152 and in Attachment B of this permit. If a term is not defined, it shall be interpreted in accordance with normal business use.

# Permit Terms and Conditions

The following applies to each permittee and permitted source with respect to only the affected emissions units and any associated air pollution control technologies in that permitted source's Approval of the Request for Coverage.

#### **Section 1: General Provisions**

#### 1. Construction and Operation

The permittee shall construct or modify, and operate the affected emission units and any associated air pollution control equipment in compliance with this permit and all other applicable federal air quality regulations; and in a manner consistent with the Request for Coverage.

#### 2. Location

This permit only authorizes the permittee to construct or modify and to operate the permitted source in the location listed in the reviewing authority's Approval of the Request for Coverage for that permitted source.

#### 3. Liability

This permit does not release the permittee from any liability for compliance with other applicable federal and tribal environmental laws and regulations, including the CAA.

#### 4. Severability

The provisions of this permit are severable. If any portion of this permit is held invalid, the remaining terms and conditions of this permit shall remain valid and in force.

#### 5. Compliance

The permittee must comply with all provisions of this permit, including emission limitations that apply to the affected emissions units at the permitted source. Noncompliance with any permit provision is a violation of the permit and may constitute a violation of the CAA; is grounds for an enforcement action; and is grounds for the reviewing authority to revoke the Approval of the Request for Coverage and terminate the permitted source's coverage under this general permit.

6. National Ambient Air Quality Standards (NAAQS)/Prevention of Significant Deterioration (PSD) Protection The permitted source must not cause or contribute to a NAAQS violation or, in an attainment area, must not cause or contribute to a PSD increment violation.

#### 7. Unavailable Defense

It is not a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the provisions of this permit.

#### 8. Property Rights

The permit does not convey any property rights of any sort or any exclusive privilege.

#### 9. Information Requests

You, as the permittee, shall furnish to the reviewing authority, within a reasonable time, any information that the reviewing authority may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. For any such

information claimed to be confidential, the permittee must submit a claim of confidentiality in accordance with 40 CFR part 2 subpart B.

#### 10. Inspection and Entry

Upon presentation of proper credentials, the permittee must allow a representative of the reviewing authority to:

- a. Enter upon the premises where a permitted source is located or emissions-related activity is conducted or where records are required to be kept under the conditions of the permit;
- b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- c. Inspect, during normal business hours or while the permitted source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
- d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- e. Record any inspection by use of written, electronic, magnetic and photographic media.

#### 11. Posting of Coverage

This general permit, and the most current Approval of the Request for Coverage for the permitted source, must be posted prominently at the facility, and each affected emissions unit and any associated air pollution control technology must be labeled with the identification number listed in the Approval of the Request for Coverage for that permitted source.

#### 12. Duty to Obtain Source-specific Permit

If the reviewing authority intends to terminate a permitted source's coverage under this general permit for cause as provided in Section 6 of this general permit, then the permittee shall apply for and obtain a source-specific permit as required by the reviewing authority.

#### 13. Credible Evidence

For the purpose of establishing whether the permittee violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a permitted source would have been in compliance with applicable requirements if the permittee had performed the appropriate performance or compliance test or procedure.

#### 14. Setbacks

Each affected emissions unit shall not locate less than 150 feet from the nearest property boundary and not less than 1,000 feet from the nearest residence.

#### Section 2: Emission Limitations and Standards

15. The permittee shall maintain and operate each affected emission unit, including any associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions of NSR regulated pollutants and considering the manufacturer's recommended operating procedures at all times, including periods of startup, shutdown, maintenance and malfunction. The reviewing authority will determine whether the permittee is using acceptable operating and maintenance procedures based on information available to the reviewing authority which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the permitted source.

- 16. Open burning at the permitted source is prohibited. The burning and combustion of wood or lumber products shall only occur within wood-fired boilers.
- 17. Each affected emissions unit shall not cause to be discharged into the atmosphere any gases that exhibit 20 percent opacity or greater averaged over any consecutive six-minute period.
- 18. Liquid fuels shall contain no more than 0.0015 percent sulfur by weight.
- 19. Production of finished lumber shall not exceed 25 million board feet (Mbf) per year based on a 12-month rolling total. The 12-month rolling total is determined by the sum of the current month's production and the previous 11 month's production.
- 20. If located in an ozone attainment, unclassifiable, or attainment/unclassifiable area or marginal, moderate, or serious ozone nonattainment area, the combined maximum heat input capacity for all boilers shall be less than 30 million British thermal units (MMbtu)/hour.
- 21. If located in a severe or extreme ozone nonattainment area:
  - a. The combined maximum heat input capacity for all boilers shall be less than 10 MMbtu/hour.
  - b. Only natural gas may be used as a fuel in boilers.
- 22. The combined maximum engine power of all emergency engines shall be less than 600 horsepower (hp).
- 23. Volatile organic compound (VOC) emissions from all lumber drying kilns, and surface coating operations shall not exceed:
  - a. 80 tons per year based on a 12-month rolling total in an ozone, attainment, unclassifiable, or attainment/unclassifiable area;
  - b. 80 tons per year based on a 12-month rolling total in a marginal or moderate ozone nonattainment area;
  - c. 40 tons per year based on a 12-month rolling total in a serious ozone nonattainment area;
  - d. 20 tons per year based on a 12-month rolling total in a severe ozone nonattainment area; and
  - e. 8 tons per year based on a 12-month rolling total in an extreme ozone nonattainment area.
- 24. Planar mill operations shall be conducted within enclosed structures. A baghouse or fabric filter shall be used to control emissions to the atmosphere.
- 25. Sawmill operations conducted outdoors shall, at a minimum, be covered and all drop points shall be controlled using a cyclone or baghouse/fabric filter during all times when the affected emission units operate.
- 26. Sawmill operations conducted indoors shall control emissions to the atmosphere using a baghouse or fabric filter.
- 27. Each emergency engine shall:
  - a. Be equipped with a non-resettable hour meter;
  - b. Meet the following certification requirements for compression ignition emergency engines:
    - i. For model year 2006 and later engines, the engine shall be certified to the standards in 40 CFR part 89.

- c. Meet the following certification requirements for spark ignition emergency engines manufactured on or after January 1, 2009:
  - i. Engines greater than 50 hp and less than 130 hp shall be certified to the Phase I standards in 40 CFR 90.103;
  - ii. Engines greater than or equal to 130 hp shall be certified to the standards in 40 CFR 1048;
  - iii. All other spark ignition emergency engines greater than 25 hp shall meet the standards for emergency engines in Table 1 to 40 CFR Subpart JJJJ.
- d. If not required to be certified to the standards in Conditions 27.b or c:
  - i. Follow the manufacturer's emission-related operation and maintenance instructions or develop your own maintenance plan which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions;
  - ii. Change oil and filter and inspect every hose and belt every 500 hours of operation or annually, whichever comes first; and
  - iii. Inspect air cleaner or spark plugs, as applicable, every 1,000 hours of operation, or annually, whichever comes first.
- 28. The permittee shall comply with the fugitive dust control plan in Attachment C.
- 29. All VOC-containing material (e.g., coatings, thinners, and clean-up solvents) shall be stored in closed containers.
- 30. All waste materials containing VOC (e.g., soiled rags) shall be stored in sealed containers until properly disposed.

#### Section 3: Monitoring and Testing Requirements

31. Inspect Baghouse/Fabric Filter

At least once during each calendar week in which the permitted source operates, the permittee shall inspect the interior and exterior of each baghouse/fabric filter for evidence of leaks, damage, and missing bags, and take appropriate corrective actions before resuming operations. A supply of extra bags and other spare parts for the baghouse/fabric filter shall be maintained onsite.

32. Inspect Cyclone

At least once during each calendar month in which the permitted source operates, the permittee shall perform a visual inspection of each cyclone for evidence of leaking or damage, and take appropriate corrective actions before resuming operations.

#### 33. Visible Emissions Survey

At least once during each calendar week in which the permitted source operates, the permittee shall perform a visible emissions survey of all affected emissions units subject to the opacity limit in Condition 17. The survey shall be performed during daylight hours by an individual trained in EPA Method 22 while the source is in operation. If visible emissions are detected during the survey, the permittee shall either:

- a. Take corrective action so that within 24 hours no visible emissions are detected from any emission units while they are in operation; or
- b. Demonstrate compliance with the opacity limit at all units that discharged visible emissions during the survey using EPA Method 9 by an individual trained and certified in Method 9.

#### 34. Fugitive Emissions Survey

At least once during each calendar week in which the permitted source operates, the permittee shall survey the facility for visible fugitive emissions. If fugitive emissions are detected crossing the property line the permittee shall take corrective actions according to the attached fugitive dust control plan.

#### 35. Initial Performance Test for Fugitive Emissions

Within 60 days after achieving the maximum production rate at which the permitted source will operate the affected emissions unit(s), but not later than 180 days after the first day of operation after the reviewing authority issues the Approval of the Request for Coverage, the permittee shall perform an initial performance test to verify compliance with the applicable opacity limitations in Condition 17. Performance tests shall be performed:

- a. According to an EPA-approved test plan;
- b. While the permitted source is operating under typical operating conditions;
- c. Using test Method 9 from 40 CFR part 60, Appendix A with the following modifications:
  - i. The observer shall stand at least 15 feet from the emission source;
  - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources; and
  - iii. Water used for wet suppression shall not be confused with particulate matter emissions and is not to be considered a visible emission (when a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible); and
- d. The duration of each Method 9 test shall be at least 30 minutes. Compliance with each opacity limit shall be determined based on the average of at least five six-minute averages.

#### 36. Additional Performance Test(s)

Ongoing performance tests meeting the criteria of the initial performance test in Condition 35 shall be performed:

- a. When required by the reviewing authority; and
- b. At least every five years.

#### 37. Engines Not Certified by the Manufacturer

For each engine required to meet the standards in Condition 27.c.iii, but that is not certified by the manufacturer to the applicable standards the permittee shall:

- a. For an engine greater than 25 HP and less than or equal to 500 HP, conduct an initial performance test as follows:
  - i. Within 60 days after achieving the maximum production rate at which the permitted source will operate, but not later than 180 days after the first day of operation after issuance of the Approval of the Request for Coverage.
  - ii. The test shall verify compliance with the applicable emission limitations in Condition 27.c.iii.
  - iii. According to a test plan approved by the reviewing authority;
  - iv. While the permitted source is operating under typical operating conditions;
  - v. With at least three test runs, each of at least 1 hour duration;
  - vi. Within 10 percent of peak load for the engine;
  - vii. Using test methods from 40 CFR part 60, Appendix A unless alternative methods are approved by the reviewing authority in writing in advance of the test; and
  - viii. Simultaneously for CO and NO<sub>x</sub> whenever either one needs to be tested.
- b. For an engine greater than 500 hp, conduct an initial performance test and subsequent performance testing every 8,760 hours of operation or 3 years, whichever comes first as follows:

- i. The performance tests shall verify compliance with the applicable emission limitations in Condition 27.c.iii;
- ii. The performance tests shall be performed according to Conditions 37.a.iii through viii.

#### Section 4: Recordkeeping Requirements

- 38. The permittee shall maintain all records required to be kept by this permit onsite for at least five years from the date of origin, unless otherwise stated.
- 39. The permit application and all documentation supporting that application shall be maintained by the permittee for the duration of time the affected emissions unit(s) is covered under this permit.
- 40. The permittee shall maintain records of the following:
  - a. For each combustion unit, monthly fuel usage in million standard cubic feet (MMscf), gallons or tons, as applicable;
  - b. For each kiln, monthly throughput in Mbf;
  - c. Finished lumber produced on a monthly basis in Mbf and each months' 12-month rolling total;
  - d. The type (tree species) and amount (Mbf) of each wood processed on a monthly basis; and
  - e. For each coating used in a surface coating operation, the Material Safety Data Sheet, percent VOC, density of the coating, and coating usage (in gallons) on a monthly basis.
- 41. The permittee shall calculate monthly VOC emissions from the kilns and surface coating operations. Monthly VOC emissions shall be used to calculate the 12-month rolling total of VOC emissions. The 12-month rolling total is the sum of emissions from the current month and the emissions from the previous 11 months. The permittee shall calculate the monthly VOC emissions as described below and in Attachment D.
  - a. Monthly VOC emissions from kilns shall be determined based on the table shown below. If a species is not listed below, the permittee shall use the emission factors for Western White Pine, as shown in the table below, and use the temperature dependent factor that corresponds to the drying kiln's temperature capability.

Species	Maximum Kiln Temperature °F	WPP1 VOC <sup>1</sup> (pounds (lbs)/mbf)			
Non-Resinous Softwood Species					
White Fir <sup>2</sup>	≤200	0.8388			
White Fi	>200	1.0902			
Wastern Hemlack	≤200	0.5253			
Western Hemlock	>200	0.6615			
Western Ded Ceden	≤200	0.3631			
Western Red Cedar	>200	1.1453			
Resinous Softwood Species (Non-Pine I	Family)				
Develoe Fir	≤200	1.1576			
Douglas Fir	>200	1.6969			
Engelmann Spruce	≤200	0.1775			
	>200	0.2161			
Larah	≤200	1.1576			
Larch	>200	1.6969			
Resinous Softwood Species (Pine Family)					
Lodgepole Pine	≤200	1.5293			

Species	Maximum Kiln Temperature °F	WPP1 VOC <sup>1</sup> (pounds (lbs)/mbf)	
	>200	1.5293	
Ponderosa Pine	≤200	2.3450	
	>200	3.8087	
Wastern White Dine	≤200	2.8505	
Western White Pine	>200	3.8087	

<sup>1</sup> VOC emissions approximated consistent with EPA's Interim VOC Measurement Protocol for the Wood Products Industry - July 2007 (WPP1 VOC),

<u>http://www.epa.gov/ttnemc01/prelim/otm26.pdf</u>. WPP1 VOC underestimates emissions when the mass-to-carbon ratio of unidentified VOC exceeds that of propane. Ethanol and acetic acid are examples of compounds that contribute to lumber drying VOC emissions (for some species more than others), and both have mass-to-carbon ratios exceeding that of propane.

<sup>2</sup>White fir in this context refers to a common name for a mixture of several species of true fir grown in the western U.S. This mixture includes the following species: white fir, grand fir, noble fir and subalpine fir.

- b. Monthly VOC emissions from surface coating operations shall be based on a mass balance of the amount of coating used, the density of the coating, and the percent VOC of the coating.
- 42. The dates and results of all baghouse/fabric filter and cyclone inspections performed pursuant to Conditions 31 and 32, and any corrective actions taken as a result of the required inspections shall be recorded.
- 43. The dates and results of each visible emissions survey performed pursuant to Condition 33 shall be recorded. At a minimum, records shall include:
  - a. The name of the person, company or entity conducting the survey;
  - b. Whether visible emissions were detected from any emission unit;
  - c. Any corrective action taken;
  - d. The result of any corrective action; and
  - e. The results of any Method 9 tests performed.
- 44. The dates and results of each fugitive emissions survey performed pursuant to Condition 34, any corrective action taken as a result of each survey, and the result of any corrective action taken shall be recorded.
- 45. The results of each performance test conducted pursuant to Condition 35, 36, and 37 shall be recorded. At a minimum, the permittee shall maintain records of:
  - a. The date of each test;
  - b. Each test plan;
  - c. Any documentation required to approve an alternate test method;
  - d. Conditions during the test, including the engine power rating;
  - e. The results of each test; and
  - f. The name of the company or entity conducting the analysis.
- 46. For each engine, the permittee shall maintain records of:
  - a. The amount of fuel used each month for each engine (in gallons or MMscf, as appropriate);
  - b. For each fuel shipment, fuel supplier certification showing the sulfur content of the fuel;
  - c. For each engine required to be certified or using certification, documentation from the manufacturer that each engine is certified to the applicable standards;

- d. The maintenance plan for each engine;
- e. All maintenance activities conducted for each engine on a monthly basis; and
- f. For emergency engines, maintain a log of the hours of operation, including the date, time, duration, and reason(s) for use

#### Section 5: Notification and Reporting Requirements

#### 47. Notification of Construction or Modification, and Operations

The permittee shall submit a written or electronic notice to the reviewing authority within 30 days from when the permittee begins actual construction or modification, and when the permittee begins operations or resumes operation.

#### 48. Notification of Change in Ownership

If the permitted source changes ownership, then the permittee must submit a written or electronic notice to the reviewing authority within 90 days before or after the change in ownership is effective. In the report, the permittee must provide the reviewing authority a written agreement containing a specific date for transfer of ownership, and an effective date on which the new owner assumes partial and/or full coverage and liability under this permit. The submittal must identify the previous owner, and update the name, street address, mailing address, contact information, and any other information about the source if it would change as a result of the change of ownership. The permittee shall ensure that the permitted source remains in compliance with the general permit during any such transfer of ownership.

#### 49. Notification of Closure

The permittee must submit a report of any permanent or indefinite closure to the reviewing authority in writing within 90 days after the cessation of all operations at the permitted source. The notification must identify the owner, the current location, and the last operating location of the permitted source. It is not necessary to submit a report of closure for regular, seasonal closures.

#### 50. Annual Reports

The permittee shall submit an annual report on or before March 15 of each calendar year to the reviewing authority. The annual report shall cover the period from January 1 to December 31 of the previous calendar year and shall include:

- a. An evaluation of the permitted source's compliance status with the emission limitations and standards in Section 2 for each location in which the permitted source located during the calendar year;
- b. Summaries of the required monitoring, testing and recordkeeping in Sections 3 and 4; and
- c. Summaries of deviation reports submitted pursuant to Condition 50.

#### 51. Deviation Reports

The permittee shall promptly report to the reviewing authority any deviations from permit requirements including deviations attributable to upset conditions. Deviation reports shall include:

- d. Identity of the affected emissions unit where the deviation occurred;
- e. Nature of the deviation;
- f. Length of time of the deviation;
- g. Probable cause of the deviation; and
- h. Any corrective actions or preventive measures taken as a result of the deviation to minimize emissions from the deviation and to prevent future deviations.
- i. For the purposes of this permit, *promptly* means:

- i. Within 72 hours of discovery for deviations from any opacity or emission limit in Condition 17 or 23; or
- ii. Within 30 days after the end of the month in which the permittee discovered the deviation for all other deviations.

#### 52. Performance Test Reports

The permittee shall submit a test report to the reviewing authority within 45 days after the completion of any required performance test. At a minimum, the test report shall include:

- a. A description of the affected emissions unit and sampling location(s);
- b. The time and date of each test;
- c. A summary of test results, reported in units consistent with the applicable standard;
- d. A description of the test methods and quality assurance procedures used;
- e. A summary of any deviations from the proposed test plan and justification for why the deviation(s) was necessary;
- f. The amount of fuel burned, raw material consumed, and/or product produced, as applicable, during each test run;
- g. Operating parameters of the affected emissions units and control equipment during each test run;
- h. Sample calculations of equations used to determine test results in the appropriate units; and
- i. The name of the company or entity performing the analysis.

#### 53. Reporting and Notification Address

The permittee shall send all required reports to the reviewing authority at the mailing address specified in the Approval of the Request for Coverage.

#### 54. Signature Verifying Truth, Accuracy, and Completeness

All reports required by this permit shall be signed by a responsible official as to the truth, accuracy, and completeness of the information. The report must state that, based on information and belief formed after reasonable inquiry, the statements and information are true, accurate, and complete. If the permittee discovers that any reports or notification submitted to the reviewing authority contain false, inaccurate, or incomplete information, the permittee shall notify the reviewing authority immediately and correct or amend the report as soon as is practicable.

## Section 6: Changes to this General Permit

#### 55. Revising, Reopening, Revoking and Reissuing, or Terminating for Cause

The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by you, the permittee, for a permit revision, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. This provision also applies to the documents incorporated by reference.

#### 56. Terminating Coverage under this Permit

The reviewing authority may terminate a previously issued Approval of the Request for Coverage, and thereby terminate that permittee's authorization to construct or modify, and that permitted source's authorization to operate under this general permit for cause as defined in Attachment B. The reviewing authority may provide the permittee with notice of the intent to terminate, and delay the effective date of the termination to allow the permittee to obtain a source-specific permit as required by the reviewing authority.

#### 57. Change in Ownership

If the permitted source changes ownership, the reviewing authority may change the Approval of the Request of Coverage to reflect the new ownership in accordance with the administrative amendment provisions in 40 CFR 49.159(f).

#### Section 7: Obtaining Coverage under this General Permit

- 45. To obtain coverage under this general permit, an applicant must submit a Request for Coverage to the appropriate reviewing authority for the area in which the permitted source is or will be located. Attachment E contains a list of reviewing authorities and their area of coverage.
- 46. You must also submit a copy of the Request for Coverage to the Indian Governing Body for any area within Indian country in which the permitted source will locate at the same time you submit your Request for Coverage to the reviewing authority.

# **Attachment A: Abbreviations and Acronyms**

ASTM	American Society for Testing and Materials
bdt	bone dry ton
CAA	Federal Clean Air Act
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency
°F	degrees Fahrenheit
ft <sup>3</sup>	cubic feet
Mbf	thousand board feet
MMBtu/hr	million British thermal units per hour
MMscf	million standard cubic feet
MW	megawatt
lbs/mbf	pounds per thousand board feet
lbs/MMBtu	pounds per million British thermal units
NAAQS	National Ambient Air Quality Standards
NSR	new source review
NO <sub>x</sub>	nitrogen oxides, except N <sub>2</sub> O
PM	particulate matter
PSD	Prevention of Significant Deterioration
VOC	volatile organic compounds

## **Attachment B: Definitions**

Approval of the Request for Coverage means a reviewing authority's letter granting an applicant's request for construction or modification, and operation of a true minor source under the terms and conditions of this general permit.

*Cause* means with respect to the reviewing authority's ability to terminate a permitted source's coverage under a permit that:

- 1. The permittee is not in compliance with the provisions of this general permit;
- 2. The reviewing authority determines that the emissions resulting from the construction or modification of the permitted source significantly contribute to NAAQS violations, which are not adequately addressed by the requirements in this general permit;
- 3. The reviewing authority has reason to believe that the permittee obtained Approval of the Request for Coverage by fraud or misrepresentation; or
- 4. The permittee failed to disclose a material fact required by the Request for Coverage or the regulations applicable to the permitted source of which the applicant had or should have had knowledge at the time the permittee submitted the Request for Coverage.

*Construction* means any physical change or change in the method of operation including fabrication, erection, installation, demolition, or modification of an affected emissions unit that would result in a change of emissions.

*Distillate fuel* means fuel oils, including recycled oils that comply with the specifications for fuel oil numbers 1 and 2, as defined by ASTM 396, or equivalent.

Lumber kiln means a thermally insulated chamber used to dry wood.

*Permittee* means the owner or operator of a permitted source.

*Permitted source* means each sawmill facility for which a reviewing authority issues an Approval of the Request for Coverage.

*Planar mill* means a process unit that takes cut and seasoned boards from a sawmill and turns them into finished dimensional lumber.

*Request for Coverage* means a permit application that contains all the information required in the standard application form.

*Sawmill* means a facility that processes logs into lumber. This may include a head saw, a chipper, debarking, hedging, log sawing, sawdust conveying and handling, chip conveying and handling, and other associated units.

Standard cubic foot means a measure of the quantity of a gas equal to a cubic foot of volume at a temperature of 68 °F and a pressure of 29.92 inches mercury.

# Attachment C - Fugitive Dust Control Plan

- 1. Site Roadways and Plant Yard
  - a. The dust on the site roadways/plant yard shall be controlled by applications of water, calcium chloride or other acceptable fugitive dust control compound approved by the reviewing authority. Applications of dust suppressants shall be done as often as necessary to meet all applicable emission limits.
  - b. All paved roadways/plant yards shall be swept as needed between applications.
  - c. Any material spillage on roads shall be cleaned up immediately.
- 2. Plant
  - a. The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve.
  - b. The transfer point from the re-circulating belt to the feed belt shall be equipped with an enclosed chute.
- 3. Storage Piles
  - a. Stockpiling of all saw dust shall be performed to minimize drop distance and control potential dust problems.
  - b. Stockpiles shall be watered on an as needed basis in order to meet the opacity limits. Also, equipment to apply water or dust suppressant shall be available at the site, or on call for use at the site, within a given operating day.
- 4. Truck Traffic
  - a. Vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within six inches of the top of any side board, side panel or tail gate; otherwise, the truck shall be tarped.
  - b. A speed limit sign of 15 miles-per-hour or lower shall be posted on site so that it is visible to truck traffic.
- 5. Corrective Actions

If corrective action needs to be taken, the permittee shall consider and use one or more of the following options: adjust the watering and/or sweeping frequencies, reduce drop distances, increase cover, and/or take other actions to reduce fugitive dust emissions.

# **Attachment D – Sample VOC Calculations**

# Example 1: Western Hemlock with a Maximum Kiln Temperature Less than or Equal to 200 degrees Fahrenheit

Methodology:

 VOC emissions (tons/month) = kiln throughput (Mbf/month)\*VOC emission factor (lbs/Mbf)\*1 ton/2,000 lbs

Sample:

- Assume kiln throughput: 1 Mbf in a month
- VOC emission factor for western hemlock with kiln firing temperature ≤ 200° F, as shown in Condition 41: 0.5253 lbs/mbf
- VOC emissions (tons/month) = 1 mbf/month\*0.5253 lbs/mbf\*(1 tons/2,000 lbs)
- VOC emissions (tons/month) = 2.301 tons/month

#### **Example 2: Coating Emissions**

Methodology:

• VOC emissions (tons/month) = solvent usage (gallons)\*density (lbs/gal)\*% VOC\*1 ton/2000 lbs

Sample:

- Assume: 5 gallons of coating used in a month, coating density of 5 lbs/gallon, coating VOC content is 30%
- VOC emissions (tons/month) = 5 gallons\*5 lbs/gallon\*0.30 VOC\*1 ton/2000 lbs
- VOC emissions (tons/month) = 0.00375 tons/month

# Attachment E – List of the EPA Reviewing Authorities and Areas of Coverage

EPA Region	Address	Area Covered	Phone Number
Region I	1 Congress Street	Connecticut, Maine,	888- 372-7341
	Suite 1100	Massachusetts, New Hampshire,	617-918-1111
	Boston, MA 02114–2023	Rhode Island, and Vermont	
Region II	290 Broadway	New Jersey, New York, Puerto Rico,	877-251-4575
	25th Floor	and Virgin Islands	
	New York, NY 10007–1866		
Region III	1650 Arch Street	Delaware, District of Columbia,	800-438-2474
	Philadelphia, PA 19103–2187	Maryland, Pennsylvania, Virginia,	215-814-5000
		and West Virginia	
Region IV	Sam Nunn Atlanta Federal Center	Alabama, Florida, Georgia,	800-241-1754
	61 Forsyth Street SW	Kentucky, Mississippi, North	404-562-9000
	12th Floor	Carolina, South Carolina, and	
	Atlanta, GA 30303	Tennessee	
Region V	77 West Jackson Street	Illinois, Indiana, Michigan,	800-621-8431
	Chicago, IL 60604	Minnesota, Ohio, and Wisconsin	312-353-2000
Region VI	1445 Ross Avenue	Arkansas, Louisiana, New Mexico,	
	Dallas, TX 75202	Oklahoma, and Texas	800-887-6063
			214-665-2760
Region VII	11201 Renner Boulevard	Iowa, Kansas, Missouri, and	800-223-0425
	Lenexa, KS 66219	Nebraska	913-551-7003
Region VIII	1595 Wynkoop Street	Colorado, Montana, North Dakota,	800-227-8917
	Denver, CO 80202–1129	South Dakota, Utah, and Wyoming	303-312-6312
Region IX	75 Hawthorne Street	American Samoa, Arizona,	866-EPA-9378
	San Francisco, CA 94105	California, Guam, Hawaii, Nevada, and Northern Mariana Islands	415-947-8000
Region X	1200 Sixth Avenue	Alaska, Idaho, Oregon, and	800-424-4372
~	Seattle, WA 98101	Washington	206-553-1200