



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

355-A Deadmore Street, Abingdon, Virginia 24210

Phone (276) 676-4800 Fax (276) 676-4899

www.deq.virginia.gov

Molly Joseph Ward  
Secretary of Natural Resources

David K. Paylor  
Director

Jeffrey Hurst  
Regional Director

### COMMONWEALTH OF VIRGINIA Department of Environmental Quality Southwest Regional Office

## STATEMENT OF LEGAL AND FACTUAL BASIS

Vaughan-Bassett Furniture Company, Inc.  
Galax, Virginia

Permit No. SWRO10308

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Vaughan-Bassett Furniture Company has applied for the renewal of a Title V Operating Permit for its plant located at 300 East Grayson Street in Galax, Virginia. The Department has reviewed the application and has prepared a Title V Operating Permit.

Permit Contact: Thomas M. Derting Date: 7/12/2017  
Thomas M. Derting  
(276) 676-4831

Air Permit Manager: Rob Feagins Date: 7/12/2017  
Rob Feagins

Regional Director: Jeffrey Hurst Date: 7/12/2017  
Jeffrey Hurst

## **FACILITY INFORMATION**

### Permittee

Vaughan-Bassett Furniture Company, Inc.  
300 East Grayson Street  
Galax, VA 24333

Facility ID No. 51-640-00003

## **FACILITY DESCRIPTION**

NAICS Code: 337122 – Nonupholstered Wood Household Furniture Manufacturing  
SIC 2511 - Wood Household Furniture, Except Upholstered (except wood box spring frames)

The Vaughan-Bassett Furniture Company is located at the intersection of E. Grayson Street and S. Railroad Avenue between Chestnut Creek and Railroad Avenue in Galax, Virginia. The facility has four existing (registered) and seven permitted kilns to dry raw lumber. A full kiln of wood can be dried in approximately two weeks. Steam from four wood/coal-fired boilers is used to heat the kilns. All four boilers are subject to MACT DDDDD, however, two of the boilers are considered limited-use boilers.

The dried lumber is cut to the desired dimensions. Scrap wood is conveyed to a hog where it is reduced in size and conveyed to the wood silo to ultimately be used as fuel in the wood-fired boilers. The dimensioned wood passes through a variety of sanding operations before gluing and assembly.

Nine bagfilters make up the wood dust collection system, which removes wood dust and chips from the various processing operations. The collected wood particles are used as fuel for the boilers.

After the wood components are assembled, they are transported to the finishing operations. The finishing of wood furniture is a multi-step process that involves the application of many layers of finishing materials to achieve the desired appearance. The finishes are applied using a variety of different techniques, but the majority of the coatings are applied in the twelve spray booths with HVLP (high volume/low pressure) spray guns.

After a finish is applied, the furniture is allowed to dry in the open air (flash off) and/or is passed through heated ovens. After all finishes are applied and allowed to dry, the furniture undergoes final inspection, packing, and storage prior to shipment to the customer.

A veneer gluing operation, located on adjacent property, was acquired in 1998. This facility consists of a single adhesive spray booth and is used to apply water-based glues. The booth is equipped with an exhaust fan, but has no filters or other particulate control devices. The veneer gluing operation was found to be NSR permit exempt in 1998.

Vaughan-Bassett Furniture Company, Inc. plant is a Title V major source of SO<sub>2</sub>, CO, NO<sub>x</sub>, VOC, methyl alcohol, toluene, and total hazardous air pollutant (HAP) emissions. The source is located in an attainment area for all criteria pollutants. The facility is permitted under a New Source Review permit dated 9/11/2002 (as amended 12/06/2002, 4/23/2003, 4/29/2003, 5/14/2003, 1/25/2007, and 10/24/2011) and a federally-enforceable state operating permit that limits boilers B-1 and B-2 to 10% of their rated annual capacity.

## COMPLIANCE STATUS

The facility is inspected at least once every two years. The last full compliance evaluation (FCE) was completed on July 13, 2016, and was comprised of three partial inspections which were conducted on November 12, 2015, February 22, 2016, and July 13, 2016. The source was found to be in compliance with all applicable requirements during these inspections.

## EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION:

The emissions units at this facility consist of the following:

### *Boilers*

There are four wood/coal-fired boilers currently on-site. Boilers B-1 and B-2 are existing units constructed prior to 1972. Boilers B 3 and B-4 were constructed in 1986 and 1997, respectively. Boilers B-1 and B 2 both utilize a single multiclone and boilers B 3 and B 4 utilize two multiclone collectors in series to control particulate emissions. Boiler B-4 is subject to NSPS Subpart Dc. Oxygen trim systems have been added to boilers B-3 and B-4 to comply with MACT DDDDD. Each of the four boilers meets the definition of an existing large solid fuel boiler under 40 CFR Part 63 Subpart DDDDD. Boilers B-1 and B-2 meet the definition of "limited-use" units under MACT DDDDD.

### *Dry Kilns*

There are four existing (DK 1, DK 2, DK 3, & DK 4) and seven permitted wood dry kilns (DK 5, DK 6, DK 7, DK 8, DK 9, DK 10, & DK 11) on site. DK 1, DK 2, & DK 3 each have a capacity of 80,000 board feet. Kilns DK 4, DK 5, DK 6, & DK 7 are each rated at 100,000 board feet, and Kilns DK-8, DK 9, DK 10, & DK 11 are each rated at 110,000 board feet.

### *Woodworking*

The wood particles generated from the various sawing, planing, and sanding operations are controlled by a dust collection system consisting of nine bagfilters. The collected wood particles are used as boiler fuel.

### *Veneer Gluing Operation*

The veneering operation is comprised of a single glue spray booth, which is used to apply an adhesive to veneer. A variety of different glues may be used in the booth, but currently, a low-volatile water-based adhesive is being applied. The glue spray booth is equipped with an exhaust fan.

Emissions from the glue spray booth may include particulate (PM/PM-10), VOC, and HAP's. The spray booth adhesives and emissions are not limited in the current NSR permit.

### *Finishing Operations*

Many different finishing materials are applied to the furniture surfaces to achieve the desired appearance. Finishing materials are applied in twelve (12) spray booths using both high volume/low pressure (HVLP) and airless spray guns.

Emissions from the finishing operations include particulate (PM/PM-10), VOC, and HAP's. The spray booths are equipped with baffles (or panel filters) to reduce particulate emissions from overspray. Materials applied include: fillers, wood preservatives, stains, toners, glazes, washcoats, and top coats such as sealers, and lacquers. Air drying (flash-off) and heat (ovens) are used to dry and cure the finish.

**EMISSIONS INVENTORY:**

The plant-wide air pollutant emissions during calendar year 2015 are summarized in the following table:

2015 Plant-Wide Air Pollutant Emissions	
Pollutant	Tons Emitted
PM-10	12.32
VOC	621.24
NOx	35.21
SO2	7.98
CO	41.36
HAP's	62.26

**EMISSION UNIT APPLICABLE REQUIREMENTS:**

**FUEL BURNING EQUIPMENT (BOILERS)**

- B-1 (21.776 MMBtu/hr Combustion Engineering wood/coal-fired boiler)**
- B-2 (19.16 MMBtu/hr Combustion Engineering wood/coal-fired boiler)**
- B-3 (27 MMBtu/hr Keeler CP-Type wood/coal-fired boiler)**
- B-4 (28 MMBtu/hr English SF-Type wood/coal-fired boiler)**

The following fuel burning equipment requirements are from:

- ❖ 9 VAC 5 Chapter 40, Part II, Article 8, Emission Standards for Fuel Burning Equipment (Rule 4-8);
- ❖ State Operating Permit (SOP) issued January 18, 2017;
- ❖ Minor NSR permit issued 9/11/2002 (as amended 12/06/2002, 4/23/2003, 4/29/2003, 5/14/2003, 1/25/2007, and 10/24/2011); and
- ❖ 40 CFR §63 MACT DDDDD

Because all of the fuel burning equipment is subject to MACT DDDDD, none of the boiler control equipment (multiclones) are subject to compliance assurance monitoring (CAM), per 40 CFR §64.2(b)(1)(i).

1. 9 VAC 5-40-900 (Standard for Particulate Matter) establishes a particulate emission limit based on the equation:

$$E = 1.0906 \times H^{-0.2594}$$

Where: E = Maximum allowable emission ratio expressed in lbs./MMBtu  
 H = Total capacity of fuel burning equipment installed prior to 10/05/79.  
 Therefore: E =  $1.0906 \times (21.776 + 19.16)^{-0.2594}$   
 = 0.42 lb/MMBtu

2. 9 VAC 5-40-930 (Standard for sulfur dioxide) limits the hourly emissions of SO<sub>2</sub> to 2.64 K (where K is the maximum MMBtu/hr rating of the boiler). Therefore:

B-1: 21.776 MMBtu/hr \* 2.64 lb SO<sub>2</sub>/MMBtu = 57.49 lb SO<sub>2</sub>/hr  
 B-2: 19.16 MMBtu/hr \* 2.64 lb SO<sub>2</sub>/MMBtu = 50.58 lb SO<sub>2</sub>/hr

4. 9 VAC 5-40-940 (Standard for visible emissions) limits the visible emissions from the fuel burning equipment to not more than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity.
5. SOP Condition 1 limits the annual capacity factors for boilers B-1 and B-2 to less than or equal to 10% (0.10). This limitation allows boilers B-1 and B-2 to meet the definition for "limited-use boiler or process heater" in §63.7575 (MACT DDDDD).
6. NSR Condition 3 requires that PM emissions from boiler B-3 be controlled by two Barron multiclones in series. The multiclones are to have adequate access for inspection. An annual internal inspection is to be conducted on the multiclones to insure structural integrity.
7. NSR Condition 4 requires that PM emissions from boiler B-4 be controlled by two Barron multiclones in series. The multiclones are to be provided with adequate access for inspection. An annual internal inspection is to be conducted on the multiclones to insure structural integrity.
8. NSR Condition 8 specifies that test ports be provided in the exhaust stacks of the boilers B-3 and B-4.
9. NSR Condition 11 specifies that the approved fuels for boilers B-3 and B-4 are wood and coal. A change in the fuels may require a permit to modify and operate.
10. NSR Condition 12 limits annual fuel consumption in boiler B-3 to 6,065 tons of wood and 800 tons of coal, calculated monthly as the sum of each consecutive 12-month period.
11. NSR Condition 13 limits annual fuel consumption in boiler B-4 to 7,400 tons of wood and 1,500 tons of coal, calculated monthly as the sum of each consecutive 12-month period.
12. NSR Condition 14 specifies that the wood fuel burned in boilers B-3 and B-4 exclude wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates.
13. NSR Condition 15 specifies that the sulfur content of the coal to be burned in boilers B-3 and B-4 not exceed 0.8 percent by weight per shipment.
14. NSR Condition 18 limits emissions from boiler B-3 to the following:

Pollutant	lbs./MMBtu	lbs./hr	tons/yr
PM	0.30		15.00
PM-10		4.16	8.95

Pollutant	lbs./MMBtu	lbs./hr	tons/yr
SO <sub>2</sub>	1.20		13.37
VOC		1.03	1.87
NO <sub>x</sub> (as NO <sub>2</sub> )		14.88	29.37
CO		22.95	43.24

15. NSR Condition 19 limits emissions from boiler B-4 to the following:

Pollutant	lbs./MMBtu	lbs./hr	tons/yr
PM	0.30		23.14
PM-10		4.31	11.89
SO <sub>2</sub>	1.20		24.28
VOC		1.07	2.30
NO <sub>x</sub> (as NO <sub>2</sub> )		15.43	39.51
CO		23.80	54.07

16. 40 CFR §63.7500 limits the emissions from boilers B-3 and B-4 to the following values as listed in Table 2 of MACT DDDDD:

Pollutant	Emissions Limit
Hydrogen Chloride (HCl)	0.022 lbs/MMBtu
Mercury (Hg)	5.70E-06 lbs/MMBtu
Carbon Dioxide (CO)	460 ppm @ 3% O <sub>2</sub>
PM (filterable) (or Total Selected Metals (TSM))	0.32 lbs/MMBtu (0.0040 lbs/MMBtu)

Compliance with the TSM limit may be demonstrated by compliance with the corresponding lb/MMBtu PM limit. Note that the filterable 0.32 lb/MMBtu PM limit in Table 2 to MACT DDDDD exceeds the values in NSR Conditions 18 and 19. Because MACT DDDDD allows for reduced testing when the boiler emissions do not exceed 75% of the of the Table 2 values, the Table 2 PM limit will also be listed in the T5 permit. Nevertheless, the PM limits from the NSR permit (0.30 lbs/MMBtu) will be the emission limit for compliance demonstration purposes.

17. NSR Condition 21 limits visible emissions from the exhausts of boilers B-3 and B-4 to not more than 20 percent opacity except during one six-minute period in any one hour in which visible emissions must not exceed 27 percent opacity, as determined by EPA Method 9. This condition applies at all times except during startup, shutdown and malfunction.
18. 40 CFR §63.7500(a)(2) limits the opacity of the exhaust stacks on boilers B-3 and B-4, as specified in Table 4 to MACT DDDDD, to less than or equal to 10% or the highest hourly opacity measured during the performance test – however the opacity must not exceed the limits in NSR Condition 21 (20/27%). Table 4 also specifies that boilers that demonstrate compliance using stack testing must maintain the 30-day rolling average operating load at not more than 110% of the highest hourly average operating load recorded during the stack test.
19. NSR Condition 22 specifies that the NSPS equipment (boiler B-4) be operated in compliance with the requirements of 40 CFR 60, Subpart Dc.

20. 40 CFR §63.7510 and 40 CFR §63.6(i)(6)(i) require that boilers B-1, B-2, B-3, and B-4 comply with all applicable requirements of *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Major Sources* 40 CFR 63, Subpart DDDDD.
21. §63.7500(c) requires that a tune-up be completed on boilers B-1 and B-2 (as limited-use boilers) every five years as specified in §63.7540(a)(12).
22. §63.7500(a)(1) specifies that boilers B-3 and B-4 meet each work practice standard in Table 3 to MACT DDDDD. These are:
  - a. Conduct a tune-up of each boiler every five (5) years.
  - b. Operate all associated continuous monitoring systems (CMS) during the startup and shutdown of each boiler.
  - c. Allowable startup fuels are limited to one or more of the following: natural gas, synthetic natural gas, propane, other gas 1 fuels (gaseous fuels that are not natural gas or refinery gas and do not exceed a maximum concentration of 40 µg/cubic meters of mercury), distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, liquefied petroleum gas, clean dry biomass, and any fuels meeting the appropriate HCl, mercury and TSM emission standards by fuel analysis.
  - d. Monitoring data must be collected during periods of startup and shutdown. Corresponding records must be kept during periods of startup and shutdown and reports must be provided.
23. The permittee must conduct an annual internal inspection for structural integrity of the multiclone particulate control systems serving boilers B-1, B-2, B-3, and B-4 for each unit that operated at least one week during the previous 12 months, in accordance with NSR Conditions 3 and 4 and the compliance inspection provisions of 9 VAC 5-80-110 K.
24. SOP Condition 2 requires that the wood fuel combusted in boilers B-1 and B-2 be sampled and analyzed for Btu content at least once each calendar month.
25. SOP Condition 3 requires that a certification be obtained from the coal fuel supplier with each shipment of coal. Each fuel supplier certification must include the name of the supplier, the date that the coal was received; the quantity received; the coal Btu content; documentation as to where the samples were collected, and the testing methods used.
26. In accordance with 9 VAC 5-80-110 K, compliance with the visible emissions standard (9 VAC 5-40-940) for boilers B-1 and B-2 will be demonstrated by conducting a visible emissions observation on each boiler exhaust at least once each week that the boiler is operated. No action will be required if the opacity does not exceed 10%, otherwise a 6-minute Method 9 visible emissions evaluation (VEE) must be conducted. If the average opacity exceeds 20%, modifications and/or repairs must be conducted to remedy the opacity problem. If unsuccessful, the observer must conduct an 18-minute VEE to determine compliance.
27. A VEE must be conducted on boilers B-1 and B-2 at least once each calendar year in which the respective boiler operates for a period of at least one week.
28. 40 CFR §63.7525(a) requires that oxygen analyzer systems be installed, maintained, and operated on boilers B-3 and B-4. The permittee has installed oxygen trim systems, which are specifically included in the definition for "oxygen analyzer system" in §63.7575.

29. §63.7525(a)(7) requires that the oxygen trim systems on boilers B-3 and B-4 be operated at an oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen in accordance with Table 7 to MACT DDDDD.
30. Boilers B-3 and B-4 are subject to an opacity limit in Table 2 of MACT DDDDD and therefore §63.7525(c) requires that either PM CPMS, PM CEMS, or COMS be installed and operated. Because the source has elected to install COMS, the requirements from §63.75(c)(1) – (7) are applicable and are summarized as follows:
  - a. Each COMS must be installed, operated, and maintained according to Performance Specification 1 at appendix B to part 60 of Chapter 40.
  - b. A performance evaluation of each COMS must be conducted according to the requirements in §63.8(e) and according to Performance Specification 1 at appendix B to part 60 of Chapter 40.
  - c. Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period as specified in §63.8(c)(4)(i).
  - d. The COMS data must be reduced as specified in §63.8(g)(2).
  - e. The site-specific monitoring plan must include procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.
  - f. Each COMS must be operated and maintained according to the requirements in the monitoring plan and the requirements of §63.8(e). The permittee must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. Any 6-minute period for which the monitoring system is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.
  - g. The permittee must determine and record all the 6-minute averages (and daily block averages as applicable) collected for periods during which the COMS is not out of control.
31. §63.7505(c) requires that compliance with the emission limits in Table 2 to MACT DDDDD be demonstrated using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. Compliance with the applicable emission limits for hydrogen chloride (HCl), mercury, or total selected metals (TSM) may be demonstrated using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit specified in Table 2 to MACT DDDDD, otherwise, compliance for HCl, mercury, or TSM must be demonstrated using performance stack testing.
32. §63.7505(d) specifies that if compliance with the emission limits in Table 2 to MACT DDDDD is demonstrated through performance testing and subsequent compliance with operating limits through the use of CPMS, or with a CEMS or COMS, a site-specific monitoring plan must be developed:
  - a. For each CMS (including CEMS, COMS, or CPMS), the permittee must develop a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in §63.8(d) and the following:

- i. The measurement location of the CMS sampling probe or other interface is downstream of the last control device;
  - ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
  - iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift).
- b. The site-specific monitoring plan must address the following:
- i. Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);
  - ii. Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
  - iii. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 10 to MACT DDDDD), (e)(1), and (e)(2)(i).
- c. A performance evaluation of each CMS must be conducted in accordance with the site-specific monitoring plan.
- d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
33. When demonstrating compliance with an emissions limit in Table 2 to MACT DDDDD through stack testing, §63.7515 requires that all performance tests be conducted on an annual basis and be completed no more than 13 months after the previous performance test, except as follows:
- a. §63.7515(b) allows the stack testing frequency for a give pollutant to be extended to once every third year if the test results for at least 2 consecutive years show that the emissions are at or below 75% of the emission limit, and if there are no changes in the operation of the individual boiler or air pollution control equipment that could increase emissions. Each such performance test must be conducted no more than 37 months after the previous performance test. If compliance is demonstrated using emission averaging under §63.7522, performance tests must be conducted annually.
  - b. §63.7515(c) requires that if a performance test shows emissions exceeded 75% of the applicable emission limit for a pollutant in Table 2 to MACT DDDDD, then annual performance tests must be conducted for that pollutant until all performance tests over a consecutive 2-year period are at or below 75 percent of the emission limit.
  - c. A 5-year performance tune-up must be conducted on boilers B-3 and B-4 according to §63.7540(a)(10)(i) through (vi). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.
  - d. If compliance with the mercury, HCl, or TSM limitation in Table 2 to MACT DDDDD is based on fuel analysis, a monthly fuel analysis according to §63.7521 must be conducted for each type of fuel burned. This monthly fuel analysis may be completed any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If a new type of fuel is burned, a fuel analysis must be conducted before burning the new type of fuel in the boiler. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, the fuel analysis frequency may be extended to quarterly

for that fuel. If any quarterly analysis exceeds 75 percent of the compliance level or a new type of fuel is burned, monthly fuel analyses must be conducted until 12 months of fuel analyses are again less than 75 percent of the compliance level. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply.

- e. §63.7515(f) requires that the results of performance tests and the associated fuel analyses must be reported within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler have not changed or provide documentation of revised operating limits established according to §63.7530 and Table 7 to MACT DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in §63.7550.
  - f. If boiler B-3 or B-4 has not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the subsequent compliance demonstration must be completed no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to MACT DDDDD. A subsequent tune-up must be completed by following the procedures described in §63.7540(a)(10)(i) through (vi) and the schedule described in §63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up.
34. §63.7520 requires that stack tests be conducted according to §63.7(c), (d), (f), and (h). A site-specific monitoring plan must be developed according to the requirements in §63.7(c). All performance tests must be conducted under such conditions as the Administrator specifies based on the representative performance of each boiler for the period being tested. Such records as may be necessary to determine the conditions of the performance tests must be made available to the Administrator upon request.
- a. Each performance test must be conducted in accordance with the requirements in Table 5 to MACT DDDDD.
  - b. Each performance test must be conducted under the specific conditions listed in Tables 5 and 7 to MACT DDDDD. The performance tests must be conducted at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury (and TSM if opting to comply with the TSM alternative standard). These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, the permittee must comply with the operating limit for operating load conditions specified in Table 4 to MACT DDDDD.
  - c. A minimum of three separate test runs must be conducted for each performance test, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Table 2 to MACT DDDDD.
  - d. If measurement results for any pollutant are reported as below the method detection level, the method detection level must be used as the measured emissions level for that pollutant in calculating compliance.
35. If fuel analysis is used to demonstrate compliance with the HCl, mercury, or TSM limits in Table 2 to MACT DDDDD, §63.7521 requires that fuel analyses be conducted according to the following procedures and Table 6 to MACT DDDDD, as applicable:
- a. Develop a site-specific fuel analysis plan that includes the following:
    - i. Identification of all fuel types anticipated to be burned in each boiler.

- ii. Notification as to whether the permittee a fuel supplier will be conducting the fuel analysis for each anticipated fuel type.
  - iii. A detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples for each anticipated fuel type.
  - iv. The analytical methods from Table 6 to MACT DDDDD, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury in each anticipated fuel type.
  - v. If fuel analysis from a fuel supplier will be used in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to MACT DDDDD.
- b. Composite fuel samples for each fuel type are to be collected and prepared according to the procedures in §40 CFR 63.7521(c) and (d).
- c. The pollutant concentrations in the fuels, expressed in lbs/MMBtu, must be determined according to the procedures in Table 6 to MACT DDDDD.
36. §63.7522 allows existing boilers (B-3 and B-4) to demonstrate compliance with the emission limits for PM (or TSM), HCl or mercury listed in Table 2 to MACT DDDDD using emissions averaging, however the combined average must be less than or equal to 90% of the corresponding limit. Average emission rates must be calculated according to the appropriate formulas and procedures listed in §63.7522.
37. §63.7533 requires that the permittee monitor and collect data according to the site specific monitoring plan and the following:
- a. The monitoring system must be operated and data collected at all required intervals at all times that each boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods, and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan.
  - b. Data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities may not be used in data averages and calculations used to report emissions or operating levels.. Results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan must be recorded and made available upon request. All data collected during all other periods must be used in assessing compliance and the operation of the control device and associated control system.
  - c. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. Data collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities, are not to be used in calculating monitoring results: Monitoring results are to be calculated using all other

monitoring data collected while the process is operating. All periods when the monitoring system is out of control must be reported in the semi-annual report.

38. 40 CFR §63.7540 requires that the permittee demonstrate continuous compliance with each emission limit specified in Table 2 of MACT DDDDD, monitor and collect data according to the site specific monitoring plan, the work practice standards in Table 3 to MACT DDDDD, and the operating limits in Table 4 to MACT DDDDD that applies according to the methods specified in Table 8 to MACT DDDDD and the following:
- a. Boiler operation above the established maximum or below the established minimum operating limits will constitute a deviation of established operating limits listed in Table 4 to MACT DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests.
  - b. As specified in §63.7555(d), records must be kept regarding the type and amount of all fuels burned in each boiler during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following:
    - i. Equal to or lower emissions of HCl, mercury, and TSM than the applicable emission limit for each pollutant, compliance is demonstrated through fuel analysis.
    - ii. Equal to or lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if compliance is demonstrated through performance testing.
  - c. If compliance with an applicable HCl emission limit is demonstrated through fuel analysis and a new solid or liquid fuel is proposed, the HCl emission rate must be recalculated using Equation 16 of §63.7530 according to the following:
    - i. The chlorine concentration for any new fuel type must be calculated in units of pounds per million Btu, based on supplier data or source fuel analysis, according to the provisions in the site-specific fuel analysis plan developed according to §63.7521(b).
    - ii. Determine the new mixture of fuels that will have the highest content of chlorine.
    - iii. Recalculate the HCl emission rate from the boiler under these new conditions using Equation 16 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.
  - d. If compliance with an applicable HCl emission limit is demonstrated through performance testing and a new type of fuel or a new mixture of fuels is proposed, the maximum chlorine input must be recalculated using Equation 7 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of §63.7530 are greater than the maximum chlorine input level established during the previous performance test, a new performance test must be conducted within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. New operating limits based on this performance test must be established according to the procedures in §63.7530(b).
  - e. If compliance with an applicable mercury emission limit is demonstrated through fuel analysis, and a new type of fuel is proposed, the mercury emission rate must be recalculated using Equation 17 of §63.7530 according to the procedures specified in below:

- i. The mercury concentration for any new fuel type must be determined in units of pounds per million Btu, based on supplier data or source fuel analysis, according to the provisions in the site-specific fuel analysis plan developed according to §63.7521(b).
  - ii. Determine the new mixture of fuels that will have the highest content of mercury.
  - iii. Recalculate the mercury emission rate from the boiler under these new conditions using Equation 17 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.
- f. If compliance with an applicable mercury emission limit is demonstrated through performance testing, and a new type or new mixture of fuel is proposed, the maximum mercury input must be recalculated using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, a new performance test must be conducted within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. New operating limits based on this performance test must be established according to the procedures in §63.7530(b).
- g. A tune-up of boilers B-3 and B-4 must be conducted every 5 years as specified below to demonstrate continuous compliance:
- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The burner inspection may be performed any time prior to the tune-up or delayed until the next scheduled or unscheduled unit shutdown, but must be inspected at least once every 72 months. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
  - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
  - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);
  - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
  - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
  - vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (1) through (3) below:
    - 1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
    - 2) A description of any corrective actions taken as a part of the tune-up; and

- 3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
  - h. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
  - i. If compliance with an applicable TSM emission limit is demonstrated through performance testing, and the use of a new type or mixture of fuel is planned, the maximum TSM input must be recalculated using Equation 9 of §63.7530. If the results of recalculating the maximum TSM input using Equation 9 of §63.7530 are higher than the maximum total selected input level established during the previous performance test, then a new performance test must be conducted within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. New operating limits must also be established based on this performance test according to the procedures in §63.7530(b).
  - j. If compliance with an applicable TSM emission limit is demonstrated through fuel analysis for solid or liquid fuels, and the use of a new type or mixture of fuel is planned, TSM emission rate must be recalculated using Equation 18 of §63.7530 according to the procedures specified in paragraphs (i) through (iii) below:
    - i. The TSM concentration must be determined for any new fuel type in units of pounds per million Btu, based on supplier data or the fuel analysis, according to the provisions in the site-specific fuel analysis plan developed according to §63.7521(b).
    - ii. The new mixture of fuels that will have the highest content of TSM must be determined.
    - iii. Recalculate the TSM emission rate from the boiler under these new conditions using Equation 18 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.
39. 63.7541 requires that continuous compliance with MACT DDDDD be demonstrated by meeting the following requirements (each failure of compliance is a deviation):
- a. For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.7522(f) and (g).
  - b. For each existing unit participating in the emissions averaging option that is equipped with a dry control system and not vented to a common stack, maintain opacity at or below the applicable limit.
  - c. For each existing unit participating in the emissions averaging option that has an approved alternative operating parameter, maintain the 30-day rolling average parameter values consistent with the approved monitoring plan.
40. §63.7545(a) requires that all applicable notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) must be submitted to the Administrator by the dates specified.
41. §63.7545(d) requires the permittee to submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

42. If a boiler fuel is switched or a physical change is made to the boiler and the fuel switch or physical change resulted in the applicability of a different MACT DDDDD boiler subcategory, §63.7545(h) requires that notice be provided within 30 days of the switch/change. The notification must identify:
  - a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels and/or were physically changed, and the date of the notice.
  - b. The currently applicable subcategory under MACT DDDDD.
  - c. The date upon which the fuel switch or physical change occurred.
43. §63.7550 requires that the permittee submit each applicable report identified in Table 9 to MACT DDDDD.
44. §63.7550(c) stipulates the specific information that each of the various compliance reports must contain. The required compliance information is identified in 63.7550(c)(5)(i) – (xviii).
45. §7550(d) identifies the required information to be included in the compliance report for each deviation from an emission limit, operating limit, or a work practice standard, at a boiler where a CMS is not to comply with that limit.
46. §63.7550(e) identifies the additional compliance information that must be submitted for each deviation from an emission limit, operating limit, and/or monitoring requirement at an individual boiler where a CMS is used to comply with that limit.
47. §63.7550(h) identifies the procedures and data formats that must be used when submitting performance testing data, CEMS performance evaluations, and the applicable reports listed in Table 9 to MACT DDDDD to EPA.
48. §63.7525(k) and SOP Condition 4 require that fuel use records for boilers B-1 and B-2 be kept for each day that the respective boiler operates.
49. SOP Condition 4 requires that records of the monthly quantities of wood and coal fuels combusted in boilers B-1 and B-2 be maintained. Records of the results of fuel heat (Btu) analyses and calculated monthly and annual heat energy (Btu's) from fuel combustion in boilers B-1 and B-2 must also be maintained.

§63.7555(d)(1) requires that records of monthly fuel use, including types and amounts, be kept for boilers B-3 and B-4.

NSR Condition 15 requires that records of all coal analyses provided by the coal supplier be maintained. NSR Condition 23 requires that coal fuel supplier certifications (indicating sulfur and Btu content) and the monthly and annual throughputs of wood and coal in boilers B-3 and B-4, be maintained.
50. §63.7555(a) identifies the records that the permittee must keep for each boiler. These include a copy of each notification and report submitted to comply with this MACT DDDDD, records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations, a copy of the federally enforceable permit (the SOP) that limits the annual capacity factors for boilers B-1 and B-2 to less than or equal to 10 percent and fuel use records for the days that these boilers were operating.

51. §63.7555(b) identifies the records that must be kept for each CEMS, COMS, and continuous monitoring system. These include: the records described in §63.10(b)(2)(vii) through (xi); the monitoring data for a COM during a performance evaluation as required in §63.6(h)(7)(i) and (ii); superseded versions of the performance evaluation plan as required in §63.8(d)(3); requests for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i); and records of the date and time that each deviation started and stopped.
52. §63.7555(c) requires that records of all monitoring data (such as opacity, pressure drop, pH, and operating load) and calculated averages used to demonstrate continuous compliance with each applicable emission limit and operating limit in MACT DDDDD be kept.
53. §63.7555(d) requires that records of the monthly fuel use by each boiler and the corresponding HCl, Mercury, and TSM emissions and supporting calculations be kept. If stack tests are performed less frequently than annually, records documenting that the emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit must be maintained. Records of the occurrence and duration of each (1) startup, (2) shutdown, and (3) malfunction of the boiler or of the associated air pollution control and monitoring equipment, as well as the actions taken during these periods, must be maintained.
54. §63.7555(e) and (f) require that following records be maintained:
  - a. If compliance is demonstrated using emissions averaging (§63.7522), §63.7555(e) requires that a copy of the emissions averaging implementation plan, all averaging calculations, and monthly records of heat input (or steam generation), and monitoring records consistent with §63.7541, must be kept.
  - b. If efficiency credits from energy conservation measures will be used to demonstrate compliance according to §63.7533, §63.7555(f) requires that a copy of the Implementation Plan required in §63.7533(d) and copies of all data and calculations used to establish credits according to §63.7533(b), (c), and (f) must be kept.
55. §63.7560 requires that the permittee maintain all records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). As specified in §63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept on site, or it must be accessible from 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). Such records may be kept off-site for the remaining 3 years.
56. Records of all VEE's conducted on boilers B-1 and B-2 must be maintained and must include the date, time, unit, the applicable visible emissions requirement, the observation results, and the name of the observer, in accordance with 9 VAC 5-80-110 K.

#### **DRY KILNS**

There are eleven lumber dry kilns at the facility. Kilns DK-1 through DK-4 are existing units and DK-5 through DK-11 are subject to minor new source permitting. The following dry kiln requirements are from:

- ❖ Minor NSR permit issued 9/11/2002 (as amended 12/06/2002, 4/23/2003, 4/29/2003, 5/14/2003, 1/25/2007, and 10/24/2011); and
- ❖ 40 CFR §63 MACT DDDD

57. The eleven dry kilns are subject to MACT DDDD, however there are no applicable requirements for dry kilns other than the initial notification requirements in 40 CFR 63.9(b).
58. NSR Condition 9 limits the processing of lumber in dry kilns DK-5, DK-6, DK-7, DK-8, DK-9, DK-10, and DK-11 to a combined total of 28,677,000 board feet per year, to be calculated monthly. NSR Condition 9 also requires that the total quantities of softwood and hardwood dried in these kilns be maintained such that the following equation is valid:

$$(3.40 \times S) + (0.34 \times H) \leq 65,060$$

where: S = total softwood (pine) dried, expressed in thousands of board-feet per year; and  
H = total hardwood dried, expressed in thousands of board-feet per year

Records of the total board-feet of hardwood and softwood dried in kilns DK-5, DK-6, DK-7, DK-8, DK-9, DK-10, and DK-11 are to be maintained on a monthly basis. These records must be available on site for inspection by Department personnel and kept on file for the most current five-year period.

59. NSR Condition 17 limits the combined VOC emissions from dry kilns DK-5, DK-6, DK-7, DK-8, DK-9, DK-10, and DK-11, to 11.13 lbs/hr and 32.53 tons/yr. Annual emissions must be calculated as the sum of each consecutive twelve (12) month period.
60. NSR Condition 23 requires that records of emission data and operating parameters necessary to demonstrate compliance be maintained. The content of and format of such records must be arranged with the Director, Southwest Regional Office. These records must include: the combined total board-feet of green lumber processed in dry kilns DK-5, DK-6, DK-7, DK-8, DK-9, DK-10, and DK-11 (segregated as to hardwood or softwood), calculated monthly as the sum of each consecutive twelve (12) month period; and the pollutant specific emission factors (F factors) and equations used to calculate actual emission rates from the dry kilns. These records must be available on site for inspection by the DEQ and must be current for the most recent five (5) years.
61. If testing is conducted in addition to the monitoring specified in this permit, the permittee must use the appropriate method(s) in accordance with procedures approved by the DEQ, in accordance with 9 VAC 5-80-110.

## WOODWORKING

The woodworking operations at the facility include various sawing, planing, and sanding operations. The particulate emissions generated from the woodworking operations are controlled by a dust collection system consisting of nine bagfilters. The collected wood particles are used as boiler fuel. The particulate (PM-10) emissions from the woodworking operations are subject to compliance assurance monitoring. The following dry kiln requirements are from the NSR permit issued 9/11/2002 (as amended 12/06/2002, 4/23/2003, 4/29/2003, 5/14/2003, 1/25/2007, and 10/24/2011).

62. NSR Condition 5 requires that particulate emissions from the woodworking operations at the facility be controlled by fabric filters, or equivalent. Each fabric filter must be provided with adequate access for inspection, and be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each device must be located in an accessible location and maintained such that each is in proper working order at all times.
63. NSR Condition 6 requires that all subsequent transfer of the collected material from the woodworking equipment at the facility be controlled by a completely enclosed transfer system.
64. NSR Condition 7 requires that fugitive particulate emissions from the collection and transferring of collected wood particles be controlled by a rotary airlock from the collector to an enclosed bin and complete enclosure.
65. NSR Condition 8 requires that the facility be constructed so as to allow for emissions testing and test ports must be provided in the exhaust of each fabric filter in the wood dust collection system.
66. NSR Condition 10 limits the woodworking operations to processing not more than 57,027,600 board-feet of lumber per year, calculated as the sum of each consecutive twelve (12) month period.
67. NSR Condition 16 limits the emissions from the woodworking equipment, as exhausted from each fabric filter in the dust collection system, to:
- |                    |                  |               |
|--------------------|------------------|---------------|
| Particulate Matter | 0.01 grains/dscf | 17.61 tons/yr |
| PM-10 (filterable) | 0.01 grains/dscf | 8.80 tons/yr  |
68. NSR Condition 20 limits visible emissions from each fabric filter exhaust in the wood dust collection system to 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This requirement applies at all times except during startup, shutdown and malfunction.
69. Visible emission observations will be conducted on each of the bagfilters controlling emissions from the woodworking operations that exhaust directly to the atmosphere (this condition does not apply to units that exhaust into the plant). The visible emissions observations are to be conducted at least once each week during periods of normal facility operation for a sufficient time period to determine the presence of any visible emissions. If no visible emissions are observed, no action will be required. However, if the visible emissions are observed, a visible emissions evaluation (VEE) must be conducted in accordance with 40 CFR 60 Appendix A, Method 9 for a period of not less than 6-minutes. If the average opacity exceeds 5%, modifications and/or repairs must be performed to correct the problem and the corrective measures must be recorded. If the corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, must be performed for a period of at least 18 minutes to determine compliance with the 5% opacity limit specified in the previous condition. The visible emissions observer must be Method 9 certified.
70. A record of each visible emissions observation must be maintained and include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.
71. Records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit must be maintained. The content of and format of such records is to be arranged with the Director, Southwest Regional Office. These records must include the results of the opacity

checks and any VEE's conducted on the woodworking bagfilters. These records must be available on site for inspection by the DEQ and must be current for the most recent five (5) years.

72. The Compliance Assurance Monitoring (CAM) Plan for the woodworking operations requires that the permittee monitor, operate, calibrate, and maintain the baghouses (BF-1 through BF-9) controlling the emissions from the woodworking equipment (WW-1) as follows:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Conduct weekly visible emission observations.	Check for presence of visible emissions	Instantaneous observation of visible emissions
Conduct semi-annual internal inspection and maintenance on each baghouse.	Inspections will be conducted by a qualified person with at least one year of experience in maintenance of mechanical equipment.	Air flow restrictions and/or holes in filter bags affecting proper operation of the baghouse.

The permittee must conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.

73. The CAM Plan for the woodworking operations requires the collection of data at all required intervals when the baghouses are operating (except for associated repairs and required quality assurance or control activities). Data recorded during repairs and required quality assurance or control activities is not to be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.
74. The woodworking operations CAM Plan requires that upon detection of an excursion or exceedance, the permittee must restore operation of the affected baghouse to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response must include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
75. The woodworking operations CAM Plan states that a determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture
76. The woodworking operations CAM Plan states that if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or

designated conditions, the permittee must promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

77. The woodworking operations CAM Plan states that if any baghouse experiences more than six excursions during a semiannual reporting period, the permittee must develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee must have it available for inspection. The QIP initially must include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee must modify the plan to include procedures for conducting one or more of the following, as appropriate:
- Improved preventative maintenance practices;
  - Process operation changes;
  - Appropriate improvements to control methods;
  - Other steps appropriate to correct control performance; and
  - More frequent or improved monitoring.
78. If testing is conducted in addition to the monitoring specified in the Title V permit, the permittee must use the appropriate method(s) in accordance with procedures approved by the DEQ.

#### **VENEER GLUING OPERATIONS**

The veneer gluing operation is comprised of a single glue spray booth, which is used to apply an adhesive to veneer. A variety of different glues may be used in the booth, but currently, a low-volatile water-based adhesive is being applied. The glue spray booth is equipped with an exhaust fan. The following veneer gluing requirements are from:

- ❖ 9 VAC 5 Chapter 40, Part II, Article 1, Visible Emissions and Fugitive Dust/Emissions (Rule 4-1); 9 VAC 5-40-80, Standard for visible emissions;
- ❖ 9 VAC 5 Chapter 40, Part II, Article 4, Emission Standards for General Process Operations (Rule 4-4); 9 VAC 5-40-260, Standards for particulate matter (AQCR 1-6); and
- ❖ 40 CFR §63 MACT JJ

79. In accordance with 9 VAC 5-40-260, particulate matter (PM) emissions from the veneer glue spray booth (G 1) must not exceed the hourly emission rate as calculated using the following equation:

$$E = 4.10 \times P^{0.67}$$

Where: E = PM emission rate, in lbs/hr  
P = Process weight rate in tons/hr

The tons of furniture processed on a monthly basis is divided by the corresponding monthly hours of furniture line operation to obtain an average hourly process weight rate (P).

80. In accordance with 9 VAC 5-40-80, visible emissions from the veneer glue spray booth exhaust (GS 1) must not exceed 20 percent opacity, except during one six minute period in any one hour in which visible emissions may not exceed 60 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

81. 40 CFR §63.802 (MACT JJ) limits volatile hazardous air pollutant (VHAP) emissions from the veneer glue spray booth to the following:
- a. For contact adhesive operations compliant contact adhesives are to be used based on the following criteria:
    - i. For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;
    - ii. For foam adhesives used in products that meet flammability requirements the VHAP content may not be more than 1.8 lb VHAP/lb solids, as applied;
    - iii. For all other contact adhesives the VHAP content may not be more than 1.0 lb VHAP/lb solids, as applied.
  - b. Limit formaldehyde emissions by complying with either of the following:
    - i. Limit total formaldehyde use in contact adhesives to no more than 400 pounds per rolling 12-month period.
    - ii. Use contact adhesives only if they contain no more than 1.0 percent formaldehyde by weight, in any wood furniture manufacturing operations.
82. 40 CFR 63.804(g) specifies that continuous compliance with the adhesive VHAP emissions limits are to be determined as follows:
- a. For contact adhesive operations when compliant adhesives are being used to show initial compliance the permittee must submit a compliance certification with the semiannual report. The compliance certification must state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
  - b. For work practice standards the permittee must submit a compliance certification with the semiannual report. The compliance certification must state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan.
83. All submittals to the Administrator are to be sent to the Director, Southwest Regional Office and to EPA Region III at the following address (per 40 CFR §63.13):
- EPA Region III  
Director, Air, Radiation and Toxics Division  
1650 Arch Street  
Philadelphia, PA 19103-2029
84. The veneer gluing operations must meet the operation and maintenance requirements in 40 CFR 63.6(e), as follows:
- a. At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain the facility, including associated air pollution control equipment, in a

manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

- b. Malfunctions must be corrected as soon as practicable after their occurrence.
  - c. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
  - d. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
85. 40 CFR 63.803(a)-(l) require that the following work practice standards be developed and implemented for the veneer gluing operations:
- a. **Work practice implementation plan** - The permittee must prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the gluing operations and addresses each of the work practice standards presented in paragraphs b through f of this condition. The plan must be developed no more than 60 days after the compliance date. The written work practice implementation plan must be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in §63.803 of Subpart JJ or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
  - b. **Operator training course** - The permittee must train all new and existing personnel, including contract personnel, who are involved in gluing and cleaning operations, use of manufacturing equipment in these operations, or implementation of the requirements of Subpart JJ. All new personnel must be trained upon hiring. All existing personnel must be trained within six months of the compliance date. All personnel must be given refresher training annually. The permittee must maintain a copy of the training program with the work practice implementation plan. The training program must include, at a minimum, the following:
    - i. A list of all current personnel by name and job description that are required to be trained;
    - ii. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
    - iii. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
    - iv. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
  - c. **Inspection and maintenance plan** - The permittee must prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
    - i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply adhesives or organic HAP solvents;

- ii. An inspection schedule;
  - iii. Methods for documenting the date and results of each inspection and any repairs that were made;
  - iv. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
    - 1) A first attempt at repair must be made no later than five calendar days after the leak is detected; and
    - 2) Final repairs must be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs must be completed within three months.
- d. Cleaning solvent accounting system - The permittee must develop an organic HAP solvent accounting form to record:
- i. The quantity and type of organic HAP solvent used each month for cleaning, as defined in §63.801 of Subpart JJ;
  - ii. The quantity of spent organic HAP solvent generated from each cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. Chemical composition of cleaning - The permittee must not use cleaning solvents that contain any of the pollutants listed in Table 4 of Subpart JJ, in concentrations subject to MSDS reporting as required by OSHA.
- f. Storage requirements - The permittee must use normally closed containers for storing gluing, and cleaning materials.
86. 40 CFR 63.806 & 63.10(b)(1), (b)(2), & (c)) specify that the following records be maintained for the veneer gluing operations:
- a. For emission limit purposes the permittee must maintain the following:
    - i. A certified product data sheet for each contact adhesive subject to the emission limits in Subpart JJ; and
    - ii. The VHAP content, in lb VHAP/lb solids, as applied, of each contact adhesive subject to the emission limits in Subpart JJ.
  - b. The permittee must maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
    - i. Records demonstrating that the operator training program is in place;
    - ii. Records collected in accordance with the inspection and maintenance plan;
    - iii. Records associated with the cleaning solvent accounting system; and
    - iv. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
  - c. The permittee must maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
  - d. The permittee must maintain records of all other information submitted with the compliance status report and the semiannual reports.

- e. The permittee must maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files must be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data must be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
87. 40 CFR 63.9(h) specifies that each time a notification of compliance status is required for the veneer gluing operations, the permittee must submit to the Director, Southwest Regional Office and/or the Administrator, a notification of compliance status, signed by a responsible official of the company that owns or operates the facility who must certify its accuracy, attesting to whether the source has complied with Subpart JJ. The notification must list:
- a. The methods that were used to determine compliance;
  - b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
  - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
  - e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions data generated for this notification);
  - f. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
  - g. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.
88. 40 CFR 63.807 & 63.10(d)-(e) include the following additional reporting requirements for the veneer gluing operations:
- a. The permittee when demonstrating initial compliance (when not using a control device) must submit the compliance status report required by §63.9(h) no later than 60 days after the compliance date.
  - b. The permittee when demonstrating continuous compliance (when not using a control device) must submit a report covering the previous 6 months of wood furniture manufacturing operations:
    - i. The first report must be submitted 30 calendar days after the end of the first 6-month period following the compliance date.
    - ii. Subsequent reports must be submitted 30 calendar days after the end of each 6-month period following the first report.

- iii. The semiannual reports must include the information required by 40 CFR 63.803(a)-(1), a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
  - iv. The frequency of the reports required by paragraph b of this condition must not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
89. The permittee must perform visible emissions observations on the veneer glue spray booth exhaust (GS-1) at least once each week during normal facility operation. Each visible emissions observation must be performed for a sufficient period of time to identify the presence of visible emissions. If visible emissions do not appear to exceed ten percent (10%) opacity, no action will be required. However, if the observed visible emissions appear to exceed ten percent opacity, a visible emission evaluation (VEE) must be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period of not less than 6 minutes. If the average opacity exceeds 20%, modifications and/or repairs must be performed to correct the problem and the corrective measures must be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, must be performed for a period of at least 18 minutes to determine compliance with the opacity limits. The visible emissions observer must be Method 9 certified.
90. A record of each visible emissions observation conducted on the veneer glue spray booth exhaust must be maintained and include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.
91. The permittee must maintain records of all emission data and operating parameters necessary to demonstrate compliance with the Title V permit. The content of and format of such records must be arranged with the Director, Southwest Regional Office. These records must include the following:
- a. The results of the opacity checks and any VEE's conducted on the veneer glue spray booth;
  - b. A material safety data sheet (MSDS), or certified product data sheet, for each adhesive applied in the veneer glue spray booth;
  - c. The pollutant specific emission factors (F factors) and equations used to calculate actual emission rates from the veneer glue spray booth;
  - d. The monthly consumption of each adhesive in the veneer glue spray booth;
  - e. The total weight of furniture processed through the veneer glue spray booth during each monthly period; and
  - f. The total monthly hours of operation of the furniture production line.
- These records must be available on site for inspection by the DEQ and must be current for the most recent five (5) years.
92. If testing is conducted in addition to the monitoring specified in the Title V permit, the permittee must use the appropriate method(s) in accordance with procedures approved by the DEQ.

## **FINISHING OPERATIONS**

The finishing operations at the facility include twelve (12) spray booths using both high volume/low pressure (HVLP) and airless spray guns. Emissions from the finishing operations include

particulate (PM/PM-10), VOC, and HAP's. The spray booths are equipped with baffles (or panel filters) to reduce particulate emissions from overspray. Materials applied include: fillers, wood preservatives, stains, toners, glazes, washcoats, and top coats such as sealers, and lacquers. Air drying (flash-off) and heat (ovens) are used to dry and cure the finish. The following requirements for the finishing operations are from:

- ❖ 9 VAC 5 Chapter 40, Part II, Article 1, Visible Emissions and Fugitive Dust/Emissions (Rule 4-1); 9 VAC 5-40-80, Standard for visible emissions;
- ❖ 9 VAC 5 Chapter 40, Part II, Article 4, Emission Standards for General Process Operations (Rule 4-4); 9 VAC 5-40-260, Standards for particulate matter (AQCR 1-6); and
- ❖ 40 CFR §63 MACT JJ.

93. 9 VAC 5-40-260 limits hourly particulate matter (PM) emissions from each of the finish coating spray booths (SF-1) to the following calculated emission rate:

$$E = 4.10 \times P^{0.67}$$

Where:

E = PM emission rate, in lbs/hr

P = Process weight rate in tons/hr

The tons of furniture processed on a monthly basis is divided by the corresponding monthly hours of furniture line operation to obtain an average hourly process weight rate (P).

94. 9 VAC 5-40-80 limits visible emissions from the exhausts of each finish coating spray booth (SF-1) to not more than 20 percent opacity, except during one six minute period in any one hour in which visible emissions must not exceed 60 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
95. The finishing operations must be operated in compliance with 40 CFR Part 63, Subpart JJ and 40 CFR Part 63, Subpart A, as identified in Table 1 for Subpart JJ.
96. 40 CFR 63.802 limits Volatile Hazardous Air Pollutant (VHAP) emissions from the finishing operations to the following:
- a. For finishing operations use any of the following methods;
    - i. Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
    - ii. Use compliant finishing materials that meet the following specifications:
      - 1) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
      - 2) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
      - 3) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (5) of this sub-section;
      - 4) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
      - 5) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight.

- iii. Use any combination of averaging, compliant coatings, and control device such that no greater than 1.0 lb of VHAP being emitted per lb of solids used.
  - b. For cleaning operations strippable spray booth coatings must be used that contain no more than 0.8 lb VOC/lb solids, as applied;
  - c. Limit formaldehyde emissions by complying with either of the following:
    - i. Limit total formaldehyde use in coatings to no more than 400 pounds per rolling 12-month period.
    - ii. Use coatings only if they contain no more than 1.0 percent formaldehyde by weight, in any wood furniture manufacturing operations.
97. Continuous compliance with the VHAP emission limits is to be determined in accordance with 40 CFR 63.804.(g) and 40 CFR 63.8; as follows:

- a. For finishing operations when averaging is being used to show continuous compliance, the permittee will submit the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification must state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + \dots + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + \dots + S_nW_n) / (M_{c1} + M_{c2} + \dots + M_{cn}) \quad (\text{Equation 1})$$

Where:

E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids.

$M_c$  = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.

$C_c$  = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.

W = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The emission limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month ( $M_c$  in lb solids / month) multiplied by the VHAP content in each material ( $C_c$  in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month ( $M_c$  in lb solids / month).

- b. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee must use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

- c. For finishing operations when compliant coatings are being used to show continuous compliance and the coatings are being applied using continuous coaters the permittee must demonstrate continuous compliance by either of the following:
  - i. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, use compliant thinners, and submit a compliance certification with the semiannual report which states that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.
  - ii. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir, use compliant thinners, maintain a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintain records of solvent additions, and submit a compliance certification with the semiannual report which states that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification must state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period. The facility is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.
- d. For strippable spray booth coatings the permittee must submit a compliance certification with the semiannual report. The compliance certification must state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
- e. For work practice standards the permittee must submit a compliance certification with the semiannual report. The compliance certification must state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan.

(9 VAC 5-80-110 and 40 CFR 63.804.(g) & 40 CFR 63.8)

- 98. All submittals to the Administrator are to be sent to the Director, Southwest Regional Office and to EPA Region III at the following address (per 40 CFR §63.13):

EPA Region III  
Director, Air, Radiation and Toxics Division  
1650 Arch Street  
Philadelphia, PA 19103-2029

99. Per 40 CFR 63.6(e), operation and maintenance requirements for the finishing operations include the following:
- a. At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
  - b. Malfunctions must be corrected as soon as practicable after their occurrence.
  - c. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
  - d. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
100. In accordance with 40 CFR 63.803(a)-(l), the permittee must develop and implement the following work practice standards:
- a. Work practice implementation plan - The permittee must prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in paragraphs b through l of this condition. The plan must be developed no more than 60 days after the compliance date. The written work practice implementation plan must be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in §63.803 of Subpart JJ or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
  - b. Operator training course - The permittee must train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of Subpart JJ. All new personnel must be trained upon hiring. All existing personnel must be trained within six months of the compliance date. All personnel must be given refresher training annually. The permittee must maintain a copy of the training program with the work practice implementation plan. The training program must include, at a minimum, the following:
    - i. A list of all current personnel by name and job description that are required to be trained;
    - ii. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
    - iii. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
    - iv. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

- c. **Inspection and maintenance plan** - The permittee must prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
  - i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, or organic HAP solvents;
  - ii. An inspection schedule;
  - iii. Methods for documenting the date and results of each inspection and any repairs that were made;
  - iv. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
    - 1) A first attempt at repair (e.g., tightening of packing glands) must be made no later than five calendar days after the leak is detected; and
    - 2) Final repairs must be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs must be completed within three months.
- d. **Cleaning and washoff solvent accounting system** - The permittee must develop an organic HAP solvent accounting form to record:
  - i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of Subpart JJ;
  - ii. The number of pieces washed off, and the reason for the washoff; and
  - iii. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. **Chemical composition of cleaning and washoff solvents** - The permittee must not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of Subpart JJ (see attached), in concentrations subject to MSDS reporting as required by OSHA.
- f. **Spray booth cleaning** - The permittee must not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee must use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- g. **Storage requirements** - The permittee must use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- h. **Each owner or operator of an affected source must not use conventional air spray guns except when all emissions from the finishing application station are routed to a functioning control device.**
- i. **Line cleaning** - The permittee must pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- j. **Gun cleaning** - The permittee must collect all organic HAP solvent used to clean spray guns into a normally closed container.

- k. Washoff operations - The permittee must control emissions from washoff operations by:
  - i. Using normally closed tanks for washoff; and
  - ii. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- l. Formulation assessment plan for finishing operations - The permittee must prepare and maintain with the work practice implementation plan a formulation assessment plan that:
  - i. Identifies VHAP from the list presented in Table 5 of Subpart JJ (see attached) that are being used in finishing operations;
  - ii. Establishes a baseline level of usage for each VHAP identified. The baseline usage level must be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene, which must be determined as specified by §63.803 (1)(2). For VHAP's that do not have a baseline, one will be established according to below paragraph iv of this condition.
  - iii. Tracks the annual usage of each VHAP identified that is present in amounts subject to MSDS reporting as required by OSHA.
  - iv. If the annual usage of the VHAP identified exceeds its baseline level, then the permittee of the facility must provide a written notification to the Director, Southwest Regional Office and/or the Administrator that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
    - 1) The exceedance is no more than 15.0 percent above the baseline level;
    - 2) Usage of the VHAP is below the de minimis level presented in Table 5 for that VHAP;
    - 3) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
    - 4) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
  - v. If none of the explanations listed the above paragraph iv of this condition are the reason for the increase, the permittee must confer with the Director, Southwest Regional Office and/or the Administrator to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical must be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Director, Southwest Regional Office and/or the Administrator and the owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator must develop a plan to reduce usage of the pollutant to the extent feasible. The plan must address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
  - vi. If the facility uses a VHAP of potential concern listed in Table 6 of Subpart JJ for which a baseline level has not been previously established, then the baseline level must be established as the de minimis level provided in that same table. The permittee must track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of Subpart JJ for that chemical, then

the permittee must provide an explanation to the Director, Southwest Regional Office and/or the Administrator that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in the above paragraph iv of this condition, the affected source must follow the procedures established in the above paragraph v of this condition.

101. In accordance with 40 CFR 63.806 and 63.10(b)(1), (b)(2), & (c), records of the following must be maintained for the finishing operations:
- a. For emission limit purposes the permittee must maintain the following:
    - i. A certified product data sheet for each finishing material, thinner, and strippable spray booth coating subject to the emission limits in Subpart JJ,
    - ii. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material subject to the emission limits in Subpart JJ; and
    - iii. The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Subpart JJ.
  - b. Following the averaging method the permittee must maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.
  - c. Following the continuous coating operations, where viscosity is being used to determine compliance, the permittee must maintain the records required by paragraph a of this condition as well as the following:
    - i. Solvent and coating additions to the continuous coater reservoir;
    - ii. Viscosity measurements; and
    - iii. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.
  - d. The permittee must maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan.
  - e. The permittee must maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
  - f. The permittee must maintain records of all other information submitted with the compliance status report and the semiannual reports.
  - g. The permittee must maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files must be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data must be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
102. 40 CFR 63.9(h) specifies that when a notification of compliance is required, the notification (signed by a responsible official of the owner/operator who certifies its accuracy) must be submitted attesting to whether the source has complied with Subpart JJ. The notification is to be sent to the DEQ and/or the Administrator and must list the following information:
- a. The methods that were used to determine compliance;

- b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
  - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
  - e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions data generated for this notification);
  - f. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
  - g. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in the Title V permit.
103. 40 CFR 63.807 & 63.10(d)-(e) include the following additional reporting requirements for the veneer gluing operations:
- a. The permittee when demonstrating initial compliance (when not using a control device) must submit the compliance status report required by §63.9(h) no later than 60 days after the compliance date.
  - b. The permittee when demonstrating continuous compliance (when not using a control device) must submit a report covering the previous 6 months of wood furniture manufacturing operations:
    - i. The first report must be submitted 30 calendar days after the end of the first 6-month period following the compliance date.
    - ii. Subsequent reports must be submitted 30 calendar days after the end of each 6-month period following the first report.
    - iii. The semiannual reports must include the information required by §63.804(g), a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
    - iv. The frequency of the reports required by paragraph b of this condition must not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
  - c. The permittee, when required to provide a written notification for exceedance of a baseline level (§ 63.803(l)(4)), must include in the notification one or more statements that explains the reasons for the usage increase. The notification must be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.
104. To demonstrate compliance with the 9 VAC 5-40-80 opacity limit, the permittee must perform visible emissions observations on the spray booth exhausts (SFS-1 through SFS-31) at least once each week during normal facility operation. Each visible emissions observation must be performed for a sufficient period of time to identify the presence of visible emissions. If visible emissions do not appear to exceed ten percent (10%) opacity, no action must be required. However, if the observed visible emissions appear to exceed ten percent opacity, a visible emission evaluation

(VEE) must be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period of not less than 6 minutes. If the average opacity exceeds 20%, modifications and/or repairs must be performed to correct the problem and the corrective measures must be recorded. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, must be performed for a period of at least 18 minutes to determine compliance with the opacity limits. The visible emissions observer must be Method 9 certified.

105. A record of each visible emissions observation of the spray booth exhausts (SFS-1 through SFS-31) must be maintained and must include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.
106. The permittee must maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records must be arranged with the Director, Southwest Regional Office. These records must include, but are not limited to:
  - a. A material safety data sheet (MSDS), or certified product data sheet, for each coating applied in the spray booths;
  - b. The pollutant specific emission factors (F factors) and equations used to calculate actual emission rates from the finishing operations;
  - c. The monthly consumption of each coating in the spray booths;
  - d. The total weight of furniture processed through the spray booths during each monthly period; and
  - e. The total monthly hours of operation of the furniture production line.

These records must be available on site for inspection by the DEQ and must be current for the most recent five (5) years..

107. If testing is conducted in addition to the monitoring specified in this permit, the permittee must use the appropriate method(s) in accordance with procedures approved by the DEQ.

## **PERMIT SHIELD AND INAPPLICABLE REQUIREMENTS**

108. 9 VAC 5-80-140 requires that the T5 permit include a provision stating that compliance with the conditions of the T5 permit be deemed compliance with all applicable requirements in effect as of the date that the permit and as specifically identified in the permit. The permit shield will only cover applicable requirements that are covered by terms and conditions of the permit and any other applicable requirement specifically identified as being not applicable to the source, provided that the permit includes that determination.

## **GENERAL CONDITIONS**

109. 9 VAC 5-40-80 prohibits owners or other persons to cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any hour of not more than 60% opacity.

110. Violation of NAAQS - 9 VAC 5-20-180-I, SOP Condition 7, and NSR Condition 26, require that the permittee upon request by the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and may not return to normal operation until such time as the ambient air quality standard will not be violated.
111. Maintenance - 9 VAC 5-50-20 E and NSR Condition 27 require the permittee to develop a maintenance schedule, keep records of such maintenance, and keep an inventory of spare parts needed to minimize the duration of equipment breakdowns.
112. Federal Enforceability - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
113. Permit Expiration – The T5 permit has a fixed term of five years. The expiration date will be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate will be terminated upon permit expiration.
114. Permit Expiration - The owner must submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
115. Permit Expiration - If an applicant submits a timely and complete application for a permit renewal, the failure of the source to have a permit or the operation of the source without a permit will not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
116. Permit Expiration - No source may operate after the time that it is required to submit a timely and complete application under subsection D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
117. Permit Expiration - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit will not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, will remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
118. Permit Expiration - The protection under subsections F.1 and F.5 (ii) of section 9 VAC 5-80-80 F will cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
119. Recordkeeping and Reporting - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit must contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed 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.
120. Recordkeeping and Reporting - Records of all monitoring data and support information must be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
121. Recordkeeping and Reporting - The permittee must submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and must include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
  - b. All deviations from permit requirements.
  - c. If there were no deviations from permit conditions during the time period, the permittee will include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
122. Annual Compliance Certification - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee must submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification must comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee must maintain a copy of the certification for five (5) years after submittal of the certification. This certification must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and include:
- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
  - b. The identification of each term or condition of the permit that is the basis of the certification;
  - c. The compliance status;
  - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
  - e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
  - f. Such other facts as the permit may require to determine the compliance status of the source; and
  - g. One copy of the annual compliance certification must be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:  

R3\_APD\_Permits@epa.gov
123. Permit Deviation Reporting - The permittee must notify the Director, Southwest Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset

conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee must provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report.

124. **Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner will no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office of such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner will notify the Director, Southwest Regional Office.
125. **Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability must not affect or impair the remaining conditions, requirements, or portions of the permit.
126. **Duty to Comply** - The permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
127. **Need to Halt or Reduce Activity not a Defense** - It will not be a defense for a 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 conditions of this permit.
128. **Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
129. **Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
130. **Duty to Submit Information** - The permittee must furnish to the Board, within a reasonable time, any information that the Board 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 Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee will furnish such records to the Board along with a claim of confidentiality.
131. **Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board must contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
132. **Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued must pay permit fees consistent with the requirements of

9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year will be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee will be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.

133. **Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person may cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
  - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
  - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
  - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods will be employed during sandblasting or similar operations;
  - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne will be covered or treated in an equally effective manner at all times when in motion; and,
  - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
134. **Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners will, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
135. **Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee will record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 will extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario will meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
136. **Inspection and Entry Requirements** - The permittee will allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
  - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
  - c. Inspect at reasonable times 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 applicable requirements.
137. Reopening for Cause - The permit will be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening will be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:
- a. The permit will be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - b. The permit will be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
  - c. The permit will not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.
138. Permit Availability - Within five days after receipt of the issued permit, the permittee will maintain the permit on the premises for which the permit has been issued and will make the permit immediately available to DEQ upon request.
139. Transfer of Permits - No person may transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
140. Transfer of Permits - In the case of a transfer of ownership of a stationary source, the new owner will comply with any current permit issued to the previous owner. The new owner will notify the Board of the change in ownership within 30 days of the transfer and will comply with the requirements of 9 VAC 5-80-200.
141. Transfer of Permits - In the case of a name change of a stationary source, the owner will comply with any current permit issued under the previous source name. The owner will notify the Board of the change in source name within 30 days of the name change and will comply with the requirements of 9 VAC 5-80-200.
142. Permit Revocation or Termination for Cause - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

143. **Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant will also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
144. **Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee will comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
145. **Asbestos Requirements** - The permittee must comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
146. **Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee must comply with the requirements of 40 CFR Part 68.
147. **Changes to Permits for Emissions Trading** - No permit revision will be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
148. **Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
  - a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, will be included to determine compliance.
  - b. The permit shield described in 9 VAC 5-80-140 will extend to all terms and conditions that allow such increases and decreases in emissions.
  - c. The owner must meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.