



COMMONWEALTH of VIRGINIA

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Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Norcraft Companies, LLC.
Facility Name:	Norcraft Companies, LLC.
Facility Location:	1 Millrace Drive, Lynchburg, Virginia
Registration Number:	30845
Permit Number	BRRO-30845

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 3 through 28)

August 18, 2014

Effective Date

August 17, 2019

Expiration Date

Robert J Weld,
Regional Director

August 18, 2014

Signature Date

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Facility Information

Permittee

Norcraft Companies, LLC.
3020 Denmark Avenue
Eagan, MN 55121-2271

Responsible Official

Travis Lane
Plant Manager

Facility

Norcraft Companies, LLC.
1 Millrace Drive
Lynchburg, VA 24502

Contact Person

Ralph Porter
Plant Engineer
(434) 385-7500 ext 6606

State-County-Plant Identification Number: 51-680-00153

Facility Description: NAICS 337110 –Norcraft Companies, LLC is a kitchen and bath wood cabinet manufacturing facility. Cabinet components are received by the source from suppliers. Minimal woodworking, consisting of routing, cutting, and sanding, is required prior to the finishing process.

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
W1	BH1, BH2, & BH3	Assorted wood working equipment	various	Fabric filter	BH1 & BH2 BH3	particulate	5/5/2014
F1	B-1S, B-2S, B-3S, B-4S, B-5S, B-6S, B-7S, B-8S, B-9S, B-10S, B-11S, B-12S, B-13S, B-14S, OB-1S, OB-2S, OB-3S, OB-4S, OB-5S, OB-6S, and OB-8S	Finishing line consisting of 21 spray booths	various	Dry filter	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13, B14, OB1, OB2, OB3, OB4, OB5, OB6, and OB8	particulate	5/5/2014

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Woodworking Requirements

Limitations

1. **Emissions Controls** - Particulate emissions from the dust collection systems (BH1, BH2, BH3) shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection and shall be in operation when the dust collection systems are operating.
(9VAC5-80-110 and Condition 4 of 5/5/14 Permit)
2. **Fugitive Dust/Emissions Controls** - Fugitive particulate emissions from the collection, transfer and handling of wood waste shall be controlled by rotary air lock from the collector to an enclosed bin.
(9VAC5-80-110 and Condition 5 of 5/5/14 Permit)
3. **Visible Emission Limit** - Visible emissions from each wood dust system exhaust shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110 and Condition 12 of 5/5/14 Permit)
4. **Visible Emission Limit** - Visible emissions from any fugitive emission points shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 13 of 5/5/14 Permit)
5. **Emission Limits** - Emissions from the operation of each of the wood dust collection systems (BH1 and BH2) shall not exceed the limits specified below:

Particulate Matter	0.01 gr/dscf
PM-10	0.01 gr/dscf

(9VAC5-80-110 and Condition 9 of 5/5/14 Permit)
6. **Emission Limits** - Emissions from the operation of the wood dust collection systems (BH3) shall not exceed the limits specified below:

Particulate Matter	0.01 gr/dscf
PM-10	0.01 gr/dscf
PM-2.5	0.01 gr/dscf

(9VAC5-80-110 and Condition 10 of 5/5/14 Permit)

Monitoring

7. **Monitoring Device** - Each fabric filter shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective fabric filter is operating.
(9VAC5-80-110 and Condition 7 of 5/5/14 Permit)

8. **Compliance Assurance Monitoring (CAM)** - The permittee shall implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor each fabric filter (BH1, BH2, and BH3). The approved monitoring plan shall be the attached CAM Plan (Attachment A) or the most recent revision to this plan that has been: (1) developed and approved pursuant to 40 CFR 64.7(e) and Condition 15; (2) revised pursuant to a Quality Improvement Plan in accordance with 40 CFR 64.8 and Condition 16; or (3) otherwise approved by the DEQ conforming with Condition 9, including, but not limited to, changes initiated by DEQ. (9VAC5-80-110 E and 40 CFR 64.6(c))
9. **Compliance Assurance Monitoring (CAM)** - Each monitoring approach shall be designed and implemented in compliance with 40 CFR 64.3(b) or (d). The approved CAM Plan shall include, at a minimum, the following information:
 - a. Indicator;
 - b. Measurement Approach;
 - c. Indicator Range or Condition(s) for Range Development ; and
 - d. The following performance criteria:
 - i. Data Representativeness;
 - ii. Verification of Operational Status
 - iii. QA/QC Practices and Criteria
 - iv. Monitoring Frequency
 - v. Data Collection Procedures
 - vi. Averaging Period

Changes to the CAM Plan pertaining to the information in this condition require prior approval by the DEQ and may require public participation according to the requirements of 9VAC5-80-230.
(9VAC5-80-110 E and 40 CFR 64.6(c))
10. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9VAC5-80-110 E and 40 CFR 64.6(c))
11. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (9VAC5-80-110 E and 40 CFR 64.7(b))
12. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that fabric filter BH1, fabric filter BH2, or fabric filter BH3 is required to be operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data

collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

(9VAC5-80-110 E and 40 CFR 64.7(c))

13. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of fabric filter BH1, fabric filter BH2, or fabric filter BH3, as applicable, (including the associated capture system) 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 shall 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.

(9VAC5-80-110 E and 40 CFR 64.7(d)(1))

14. **Compliance Assurance Monitoring (CAM)** - 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 system, and the process.

(9VAC5-80-110 E and 40 CFR 64.7(d)(2))

15. **Compliance Assurance Monitoring (CAM)** - 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 shall promptly (in accordance with Condition 45) notify the Blue Ridge Regional Office and submit a revised CAM Plan for approval to the Blue Ridge Regional Office 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.

(9VAC5-80-110 E, 40 CFR 64.7(e) and 40 CFR 64.6(c))

16. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions for either fabric filter BH1, fabric filter BH2, or fabric filter BH3 exceeds the Quality Improvement Plan (QIP) Threshold as defined in the approved monitoring plan as defined in Condition 8, or as otherwise required by the DEQ in accordance with review conducted under 40 CFR 64.7(d)(2), the permittee shall develop, implement and maintain a QIP in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection at the permitted facility. In the event that changes are made to the CAM Plan as a result of a QIP, the permittee shall record the revision date on Page 1 of the CAM Plan

and monitor in accordance with the most recent CAM Plan. The permittee shall submit a copy of the most recent CAM Plan to the Blue Ridge Region within 30 days of the revision date. For the purposes of this condition, the most recent version of the CAM Plan shall be based on the date as shown on page 1 of the CAM Plan.

(9VAC5-80-110 E and 40 CFR 64.8(a) and (b))

17. **Compliance Assurance Monitoring (CAM)** - Monitoring imposed under 40 CFR Part 64 shall not excuse the permittee from complying with any existing requirements under federal, state, or local law, or any other applicable requirement under the Act, as described in 40 CFR 64.10.

(9VAC5-80-110 and 40 CFR 64.10)

Recordkeeping

18. **Compliance Assurance Monitoring (CAM) Recordkeeping-** The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9VAC5-80-110 F and 40 CFR 64.9(b))

Reporting

19. **Compliance Assurance Monitoring (CAM) Reporting** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 43.c of this permit to the Blue Ridge Regional Office. Such reports shall include at a minimum:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9VAC5-80-110 F and 40 CFR 64.9(a))

Furniture Finishing Requirements

Limitations

20. **Emissions Controls** - Particulate emissions from the spray booths of the finishing operation (F1) shall be controlled by dry filters. The spray booths shall be provided with adequate access for inspection.

(9VAC5-80-110 and Condition 2 of 5/5/14 Permit)

21. **Emissions Controls** - Volatile Organic Compound emissions from the spray booths of the finishing line (F1) shall be minimized by proper spraying technique, use of high solids coating whenever possible, and by complying with the application equipment requirements of the Work Practice Standards of 40 CFR 63, Subpart JJ.
(9VAC5-80-110 and Condition 3 of 5/5/14 Permit)

22. **Visible Emission Limit** - Visible emissions from the finishing operation (F1) spray booth exhausts shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110 and Condition 11 of 5/5/14 Permit)

23. **Emission Limits** - Emissions from the wood finishing operation (F1) shall not exceed the limits specified below:

Particulate Matter	3.2 lbs/hr	13.2 tons/yr
PM-10	3.2 lbs/hr	13.2 tons/yr
PM-2.5	3.2 lbs/hr	13.2 tons/yr
Volatile Organic Compounds	99.7 lbs/hr	249.0 tons/yr

(9VAC5-80-110 and Condition 8 of 5/5/14 Permit)

Monitoring

24. **Monitoring Device** - Each spray booth shall be equipped with a device to continuously measure the differential pressure drop across the filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective spray booth is operating.
(9VAC5-80-110 and Condition 6 of 5/5/14 Permit)

25. **Periodic Monitoring** - At least one time per week an observation of the presence of visible emissions from the spray booth stacks shall be made. The presence of visible emissions shall require the permittee to take timely corrective action such that the spray booth resumes operation with no visible emissions.

The permittee shall maintain a spray booth stack observation log for the spray booths to demonstrate compliance. The log shall include the date and time of the observations, the name of the observer, whether or not there were visible emissions, and any necessary corrective action. If the spray booth has not been operated during the week, it shall be noted in the spray booth log and that a visual observation was not required.
(9VAC5-80-110 E)

Recordkeeping

26. **On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Vendor information showing VOC content, toxic compound or HAP content, water content, and solids content for each coating, adhesive, thinner, and cleaning solution used.
- b. Monthly and annual emissions calculations to verify compliance with the individual and total emission limitations in Emission Limits Condition 23. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.
- c. Scheduled and unscheduled maintenance, and operator training as required by Maintenance/Operating Procedures Condition 37.
- d. Visual emission observation logs as required by Condition 25.

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

(9VAC5-80-110 and Condition 15 of 5/5/14 Permit)

MACT Conditions (40 CFR 63, Subpart JJ)

27. **Requirements** - The wood finishing operation (F1) equipment shall be operated in compliance with the requirements of 40 CFR 63, Subpart JJ, including future revisions. (see MACT Conditions 28 through 36.b) All terms used regarding 40 CFR 63, Subpart JJ shall have the meanings as defined in 40 CFR 63.801 and 40 CFR 63.2.
(9VAC5-80-110, 40 CFR 63.800, 40 CFR 63 Subpart A, and Condition 14 of 5/5/14 Permit)

Emission Standard

28. Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits;
- 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:
 - (a) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (b) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (c) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by Emission Standard Condition 28.a.ii(e);
 - (d) 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;
 - (e) 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 and compliant coatings such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;

- b. For contact adhesive operations compliant contact adhesives shall 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 can be no more than 1.8 lb VHAP/lb solids, as applied;
 - iii. For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied;
- c. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied;
- d. No later than November 21, 2014 each owner or operator shall limit formaldehyde emissions by complying with either of the following methods:
 - i. Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period
 - ii. Use coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives, in any wood furniture manufacturing operation. Low-formaldehyde is defined in 40 CFR 63.801 as “in the context of a coating or contact adhesive, a product concentration of less than or equal to 1.0 percent formaldehyde by weight, as described in a certified product data sheet for the materials.”
- e. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9VAC5-80-110, Condition 18 of 5/5/14 Permit, and 40 CFR 63.802)

Continuous Compliance

- 29. Continuous compliance with the VHAP emissions limits shall be determined as follows: (See Notification of Compliance Condition 35 and Reporting Condition 36 for content and timing of report submissions and signature requirements)
 - a. For finishing operations when averaging is being used to show continuous compliance, the permittee shall 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 shall 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.

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

.....Equation 1

Where:

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

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

Cc = 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 (Mc in lb solids / month) multiplied by the VHAP content in each material (Cc 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 (Mc in lb solids / month).

- b. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall 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, as stated in Emission Standard Condition 28, 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 any of the following compliance methods may be used: 1) an averaging approach, as in Condition 29.a; 2) compliant coatings, as in Conditions 29.b; 3) a control system, as described in 40 CFR 63.804(a)(3) ; or 4) a combination of these methods.
- d. For contact adhesive operations when compliant adhesives are being used to show continuous compliance the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall 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.
- e. Formaldehyde compliance options:

- i. Calculate total formaldehyde emissions from all finishing materials and contact adhesives used at the facility using the following equation and maintain a value of F_{total} no more than 400 pounds per rolling 12 month period.

$$F_{total} = (C_{f1}V_{c1} + C_{f2}V_{c2} + * * * + C_{fn}V_{cn} + G_{f1}V_{g1} + G_{f2}V_{g2} + * * * + G_{fn}V_{gn})$$

.....Equation 5

Where:

- F_{total} = total formaldehyde emissions in each rolling 12 month period
- C_f = the formaldehyde content of a finishing material (c), in pounds of formaldehyde per gallon of coating (lb/gal)
- V_c = the volume of formaldehyde-containing finishing material (c), in gal
- G_f = the formaldehyde content of a contact adhesive (g), in pounds of formaldehyde per gallon of contact adhesive (lb/gal)
- V_g = the volume of formaldehyde-containing contact adhesive (g), in gal

- ii. Use a control system with an overall control efficiency (R) such that the calculated value of F_{total} is the following equation is no more than 400 pounds per rolling 12 month period.

$$F_{total} = (C_{f1}V_{c1} + C_{f2}V_{c2} + * * * + C_{fn}V_{cn} + G_{f1}V_{g1} + G_{f2}V_{g2} + * * * + G_{fn}V_{gn}) * (1-R)$$

.....Equation 6

Where:

- F_{total} = total formaldehyde emissions in each rolling 12 month period
- C_f = the formaldehyde content of a finishing material (c), in pounds of formaldehyde per gallon of coating (lb/gal)
- V_c = the volume of formaldehyde-containing finishing material (c), in gal
- G_f = the formaldehyde content of a contact adhesive (g), in pounds of formaldehyde per gallon of contact adhesive (lb/gal)
- V_g = the volume of formaldehyde-containing contact adhesive (g), in gal
- R= the overall efficiency of the control system, expressed as a percentage

- iii. To demonstrate compliance by use of low-formaldehyde coatings and contact adhesives, maintain a certified product data sheet for each coating and contact adhesive used, and submitting a compliance certification with the semiannual report.
- f. For strippable spray booth coatings, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall 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.
- g. For work practice standards, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall 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 (see the Work Practices Standards Condition 33.a).

(9VAC5-80-110, Condition 19 of 5/5/14 Permit, and 40 CFR 63.804(g & h) & 40 CFR 63.8)

Testing

30. If compliance testing is conducted the tests shall be conducted using the test methods and procedures as specified in 40 CFR 63.805.
(9VAC5-80-110 and Condition 20 of 5/5/14 Permit)

Submittals

31. All submittals to the Administrator shall be sent to the Blue Ridge Regional Office and to EPA Region III at the following address:

EPA Region III
Air Protection Division (3AP00)
ATTN: Wood Furniture NESHAP Coordinator
1650 Arch Street
Philadelphia, PA 19103-2029.

(9VAC5-80-110 and Condition 21 of 5/5/14 Permit)

Operation and Maintenance

32. The permittee shall meet the following operation and maintenance requirements:
- a. Malfunctions shall be corrected as soon as practicable after their occurrence.
 - b. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 - c. 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.

(9VAC5-80-110, Condition 21 of 5/5/14 Permit, and 40 CFR 63.6(e))

Work Practice Standards

33. The permittee shall develop and implement the following work practice standards:
- a. Work practice implementation plan –
 - i. The permittee shall 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 Work Practice Standards Conditions 33.b through 33.l that follow.
 - ii. The written work practice implementation plan shall 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 40 CFR 63.803 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.
- iii. The inspection and maintenance plan required by Condition 33.c and the formulation assessment plan for finishing operation required by Condition 33.1 are also reviewable by the Administrator.
- b. Operator training course - The permittee shall 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 40 CFR 63 Subpart JJ. All new personnel shall be trained upon hiring. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall 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 shall 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, 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:
 - (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (b) Final repairs shall 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 shall be completed within three months.
- d. Cleaning and washoff solvent accounting system - The permittee shall 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 40 CFR 63.801;
 - 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 shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40 CFR 63 Subpart JJ, in concentrations subject to MSDS reporting as required by OSHA.
- f. Spray booth cleaning - The permittee shall 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, 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 shall 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 shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- h. Application equipment requirements - As of November 21, 2014, each owner or operator of an affected source shall not use conventional air spray guns except when all emissions from the finishing application station are routed to a functioning control device. Prior to November 21, 2014, the permittee may use conventional air spray guns to apply finishing materials only under any of the following circumstances:
- i. To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
 - ii. For touchup and repair under the following conditions:
 - (a) The touchup and repair occurs after completion of the finishing operation; or
 - (b) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
 - iii. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
 - iv. When emissions from the finishing application station are directed to a control device;
 - v. The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
 - vi. The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application

technology. The permittee shall demonstrate technical or economic infeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic infeasibility:

- (a) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
 - (b) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- i. Line cleaning - The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
 - j. Gun cleaning - The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
 - k. Washoff operations - The permittee shall 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 shall 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 40 CFR 63 Subpart JJ that are being used in finishing operations;
 - ii. Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by 40 CFR 63.803(1)(2).
For VHAPs that do not have a baseline, one will be established according to Work Practices Standards Condition 33.1.vi.
 - 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 shall provide a written notification to the permitting authority 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:
 - (a) The exceedance is no more than 15.0 percent above the baseline level;
 - (b) Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR 63 Subpart JJ for that VHAP ;

- (c) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - (d) 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 in Work Practices Standards Condition 33.1.iv are the reason for the increase, the permittee shall confer with the Blue Ridge Regional Office 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 shall 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 Blue Ridge Regional Office and 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 shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall 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 40 CFR 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table. The permittee shall 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 40 CFR 63 Subpart JJ for that chemical, then the permittee shall provide an explanation to the Blue Ridge Regional Office that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in Work Practices Standards Condition 33.1.iv, the affected source shall follow the procedures established in Work Practices Standards Condition 33.1.v.

(9VAC5-80-110, Condition 23 of 5/5/14 Permit, and 40 CFR 63.803(a)-(1))

Recordkeeping

34. The permittee shall maintain records of the following:
- a. For emission limit purposes the permittee shall maintain the following:
 - i. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in 40 CFR 63 Subpart JJ,
 - ii. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in 40 CFR 63 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 40 CFR 63 Subpart JJ.
 - iv. The formaldehyde content, in lb/gal, as applied, of each finishing material and contact adhesive subject to the emission limits in Condition 28.d and chooses to comply with the 400 lb/yr limits of formaldehyde in Condition 28.d.i.

- b. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, December 7, 1998, 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. The permittee shall 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 required by Work Practice Standards Condition 33.b, is in place;
 - ii. Records collected in accordance with the inspection and maintenance plan required by Work Practice Standards Condition 33.c;
 - iii. Records associated with the cleaning solvent accounting system required by Work Practice Standards Condition 33.d;
 - iv. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Work Practice Standards Condition 33.h;
 - v. Records associated with the formulation assessment plan required by Work Practice Standards Condition 33.i; and
 - vi. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- d. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
- e. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports. The permittee shall 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 shall 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 shall 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.
- f. The permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with §63.802(c), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(9VAC5-80-110, Condition 24 of 5/5/14 Permit, and 40 CFR 63.806 & 63.10(b)(1))

Notification of Compliance

- 35. Each time a notification of compliance status is required, the permittee shall submit to the Blue Ridge Regional Office and EPA Region III a notification of compliance status, signed

by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with 40 CFR 63 Subpart JJ. The notification shall 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 40 CFR 63 Subpart JJ as expressed in this permit.
- h. If low-formaldehyde coatings and contact adhesives are being used to comply with the formaldehyde limit, a statement that low-formaldehyde coatings and contact adhesives, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance.

(9VAC5-80-110, Condition 25 of 5/5/14 Permit, and 40 CFR 63.9(h))

Reporting

36. Reporting with regard to 40 CFR 63 Subpart JJ shall consist of the following:

- a. The permittee when demonstrating continuous compliance shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
 - i. The time periods to be addressed are the calendar months **January through June** and **July through December**. Reports shall be submitted to DEQ no later than **March 1** and **September 1** of each calendar year.
 - ii. The semiannual reports shall include the information required by Continuous Compliance Condition 29, 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.
 - iii. The frequency of the reports required by Reporting Condition 36.a above, shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
- b. The permittee, when required to provide a written notification by Work Practice Standards Condition 33.1.iv for exceedance of a baseline level [40 CFR 63.803(1)(4)],

shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than March 1 after the end of the annual period in which the usage increase occurred.

(9VAC5-80-110, Condition 26 of 5/5/14 Permit, and 40 CFR 63.807 & 63.10(d))

Facility Wide Conditions

General

37. **Maintenance/Operating Procedures** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9VAC5-80-110 and Condition 30 of 5/5/14 Permit)

Testing

38. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.
 (9VAC5-80-110 and Condition 16 of 5/5/14 Permit)

Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720 B)	Rated Capacity (9VAC5-80-720 C)
D1	One (1) natural gas-fired drying oven	9VAC5-80-720 C.2.a.		1 x 10 ⁶ Btu/hr
D2	One (1) natural gas-fired drying oven	9VAC5-80-720 C.2.a.		1 x 10 ⁶ Btu/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9VAC5-80-140)

General Conditions

39. **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.
(9VAC5-80-110 N)
40. **Permit Expiration** - This permit has a fixed term of five years. The expiration date shall 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 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
41. **Permit Expiration - Application Submittal** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
42. **Permit Expiration - Application Shield** - The following apply to sources subject to Article 1, Part II of 9VAC5 Chapter 80:
 - a. If an applicant submits a timely and complete application for an initial permit or renewal under this condition, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
 - b. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
 - c. If an applicant submits a timely and complete application under section 9VAC5-80-80 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 shall 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 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

- d. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 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.

(9VAC5-80-80 B, C, and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

43. **Recordkeeping and Reporting** - To meet the requirements with respect to monitoring:

- a. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - i. The date, place as defined in the permit, and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110 F)

- b. Records of all monitoring data and support information shall 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.

(9VAC5-80-110 F)

- c. The permittee shall 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 9VAC5-80-80 G, and shall include:
 - i. 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.
 - ii. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (a) Exceedance of emissions limitations or operational restrictions;
 - (b) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

(c) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

iii. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9VAC5-80-110 F)

44. **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 shall 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. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall 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 9VAC5-80-110 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.
- g. One copy of the annual compliance certification shall 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

(9VAC5-80-110 K.5)

45. **Permit Deviation Reporting** - The permittee shall notify the Blue Ridge 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 shall 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 pursuant to General Condition 43.c of this permit.

(9VAC5-80-110 F.2 and 9VAC5-80-250)

46. **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 shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Blue Ridge Regional Office.
(9VAC5-20-180 C)
47. **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 shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9VAC5-80-110 G.1)
48. **Duty to Comply** - The permittee shall 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.
(9VAC5-80-110 G.2)
49. **Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9VAC5-80-110 G.3)
50. **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 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC5-80-190 and 9VAC5-80-260)
51. **Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110 G.5)
52. **Duty to Submit Information** - The permittee shall 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 shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9VAC5-80-110 G.6)

53. **Duty to Submit Information Certification** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.
(9VAC5-80-110 K.1)
54. **Duty to Pay Permit Fees** - The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350. The actual emissions covered by the permit program fees for the preceding year shall 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.
(9VAC5-80-110 H and 9VAC5-80-340 C)
55. **Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall 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 shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall 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.
- (9VAC5-50-90)
56. **Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, 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.
(9VAC5-50-20 E)
57. **Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall

record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.
(9VAC5-80-110 J)

58. **Inspection and Entry Requirements** - The permittee shall 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.

(9VAC5-80-110 K.2)

59. **Reopening For Cause** - The permit shall 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 shall 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 9VAC5-80-80 F.
- a. The permit shall 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 shall 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 shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110 L)

60. **Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9VAC5-80-150 E)

61. Transfer of Permits -

- a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-160)

62. Malfunction as an Affirmative Defense -

- a. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 62.b of this condition are met.
- b. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - i. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - ii. The permitted facility was at the time being properly operated.
 - iii. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - iv. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9VAC5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9VAC5-20-180 C.
- c. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- d. The provisions of this condition are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9VAC5-80-250)

63. **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 9VAC5 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.
(9VAC5-80-190 C and 9VAC5-80-260)
64. **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 shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall 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.
(9VAC5-80-80 E)
65. **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 shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)
66. **Asbestos Requirements** - The permittee shall 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).
(9VAC5-60-70 and 9VAC5-80-110 A.1)
67. **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 shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)
68. **Changes to Permits for Emissions Trading** - No permit revision shall 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.
(9VAC5-80-110 I)
69. **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 9VAC5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110 I)

70. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9VAC5-80-110 and Condition 33 of 5/5/14 Permit)

Norcraft Companies
Lynchburg, VA
COMPLIANCE ASSURANCE MONITORING PLAN
(Revision Date: August 12, 2014)
Registration No. 30845

I. Background

A. Emission Unit

Description	Dust #1, Dust #2, and Dust #3, Component Processing
Identification	BH1, BH2, and BH3
Facility	Lynchburg Plant Lynchburg, VA

e

B. Applicable Regulations, Emission Limits, and pre CAM Monitoring Requirements

Regulation:	9VAC5-50-260
CAM Emission Limits	Particulate Matter: 0.01 gr/dscf, PM-10: 0.01 gr/dscf, PM-2.5: 0.01 gr/dscf (BH3 only)
Pre CAM Monitoring Requirements:	Visible emissions from exhaust stack shall not exceed 5% Opacity as determined by EPA Method 9.

C. Control Technology, Capture System, Bypass, PTE

Controls:	BH1 – RF Filter, pulse air bag cleaning baghouse; BH2 – RF Filter, pulse air bag cleaning baghouse; BH3 – RF Filter, pulse air bag cleaning baghouse.
Capture System:	Closed duct system.
Bypass:	None
PTE Before Controls:	BH1 – > 100 TPY (Based on 99% efficiency) BH2 – > 100 TPY (Based on 99% efficiency) BH3 – > 100 TPY (Based on 99% efficiency)
PTE After Controls:	BH1 – 7.5 TPY BH2 – 7.1 TPY BH3 – 10.8 TPY

II. Monitoring Approach

A. Indicators

Visible emissions will be used as an indicator. Normal process operations will not produce conditions that adversely affect the baghouse, so no process operational parameters will be monitored.

B. Measurement Approach

Visible emissions from exhaust will be monitored daily using EPA Method 22. A one minute observation will be performed and the results recorded in a logbook by the observer.

C. Indicator Range

An excursion is defined as the presence of visible emissions.

D. Performance Criteria

Data Representation:

Measurements are being made at the point of emission (baghouse exhaust)

QA/QC Practice and Criteria

The observer will be familiar with Reference Method 22 – like procedures.

III. Response to Excursion

A. Upon noting visible emissions, the observer will immediately notify maintenance to inspect the baghouse, and operations to slow down production as feasible. Maintenance personnel will inspect the baghouse within 4 hours of receiving notification and make needed repairs as soon as practicable. Operations will return to normal upon completed correction action.

B. QIP Threshold: Five excursions in a 6 – month reporting period. (Note: Proposing a QIP threshold in CAM submittal is not required.)

JUSTIFICATION

Background

The pollution specific units are “Dust #1, Component Processing, BH1”, “Dust #2, Component Processing, BH2”, and “Dust #3, Component Processing, BH3” that collect sawdust from a variety of wood processing equipment that produces component parts to predetermined specifications. BH1 is controlled by a DONALDSON COMPANY RF Filter baghouse unit with 156 bags that filters approximately 20,000 CFM of air. BH2 is controlled by a PNEUNAFIL RF Filter baghouse unit with 316 bags that filter approximately 19,000 CFM of air. BH3 is controlled by a DONALDSON COMPANY RF Filter baghouse unit with 484 bags that filters approximately 28,842 CFM of air. All the wood processing equipment has a closed-vent system to the baghouse. There is no means for the baghouse to be bypassed.

Rationale for Selection of Performance Indicators

Visible emissions were selected as the performance indicator because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any increase in visible emissions indicate reduced performance of a particulate control device; therefore, the presence of visible emissions is used as a performance indicator.

Rational for Selection of Indicator Range

The selected range is NO visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of NO visible emissions was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a METHOD 9 certified observer is desired. Although RM-22 applies to fugitive sources, the visible / NO visible emissions technique of RM-22 can be applied to ducted emissions: i.e., Method 22 – like observations.

The selected QIP threshold for baghouse visible emissions is five excursions in a 6 – month reporting period. This level is 3% of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented. (Note: Proposing a QIP threshold in the CAM submittal is not required.)