

1. 15A NCAC 2D .1111 "MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY" - The wood furniture manufacturing operations (NO EQUIPMENT SELECTED) shall comply with all requirements of 15A NCAC 2D .1111 "Maximum Achievable Control Technology" and 40 CFR Part 63, Subpart JJ "National Emission Standards for Wood Furniture Manufacturing Operations." [40 CFR 63.800]

Regulated Material	Emission Limitation
Thinners	10% by weight HAP
stains, washcoats, sealers, topcoats, basecoats, and enamels	1.0 lb VHAP/lb solids, as applied
washcoat, basecoat, or enamel formulated onsite	coatings - 1.0 lb VHAP/lb solids thinners - 3.0% by weight VHAP
strippable spray booth coatings	0.8 lb VOC per lb solids, as applied
foam contact adhesives used in products which meet flammability requirements per California Technical Bulletin 116, 117, or 133, the Business and Institutional Furniture Manufacturers Association's (BIFMA's) X5.7, UFAC flammability testing, or any similar requirements from local, State, or Federal fire regulatory agencies	1.8 lb VHAP per lb solids, as applied
all other contact adhesives	1.0 lb VHAP/solids, as applied
coatings and contact adhesives	1.0% by weight formaldehyde or 400 pounds formaldehyde emissions per rolling 12-month period

- a. Definitions and Nomenclature - For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.801 shall apply.
- b. Regulated Pollutants - Volatile Hazardous Air Pollutants (VHAPs) and Volatile Organic Compounds (VOCs) as defined in 40 CFR 63.801.
- c. General Provisions - The Permittee shall comply with the requirements of 40 CFR Part 63, Subpart A "General Provisions," according to the applicability of Subpart A to such sources, as identified in Table 1 of 40 CFR Part 63, Subpart JJ.
- d. Work Practice Standards - The Permittee shall adhere to the work practice standards as specified by 40 CFR 63.803.
- e. Recordkeeping Requirements - The Permittee shall prepare, maintain, and follow a written work practice implementation plan in accordance with 40 CFR 63.806(e) that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards specified below:
 - i. Operator Training - in accordance with 40 CFR 63.803(b);
 - ii. Inspection and Maintenance Plan - in accordance with 40 CFR 63.803(c);
 - iii. Cleaning and Washoff Solvent Accounting System - in accordance with 40 CFR 63.803(d);

- iv. Chemical Composition of Cleaning and Washoff Solvents - in accordance with 40 CFR 63.803(e);
 - v. Spray Booth Cleaning - in accordance with 40 CFR 63.803(f);
 - vi. Storage Requirements - in accordance with 40 CFR 63.803(g);
 - vii. Application Equipment Requirements - in accordance with 40 CFR 63.803(h);); **Effective November 21, 2014 conventional air spray guns are allowed only when emissions are vented to a control device;**
 - viii. Line Cleaning - in accordance with 40 CFR 63.803(i);
 - ix. Gun Cleaning - in accordance with 40 CFR 63.803(j);
 - x. Washoff Operations - in accordance with 40 CFR 63.803(k); and
 - xi. Formulation Assessment Plan - in accordance with 40 CFR 63.803(l).
- f. Reporting Requirements - The Permittee shall submit the compliance status report to the Regional Supervisor by in accordance with 40 CFR 63.804(f)(8) and 40 CFR 63.807(b). The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(8) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(e) as required and 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- g. Finishing Operations - Per 40 CFR 63.804(a)(4), the Permittee has chosen to use the **compliant coatings** compliance option for the finishing operations (NO EQUIPMENT SELECTED).
- i. Emission Limits - The Permittee shall comply with all provision of 40 CFR 63.802(a)(1) and 63.804(a)(2) as applicable to the finishing operations (NO EQUIPMENT SELECTED). All thinners, stains, washcoats, sealers, topcoats, basecoats, and enamels used at the facility shall meet the emission limitations as detailed in the following table:

Regulated Material	Emission Limitation
thinners	10% by weight HAP
stains, washcoats, sealers, topcoats, basecoats, and enamels	1.0 lb VHAP/lb solids, as applied
washcoat, basecoat, or enamel formulated onsite	coatings - 1.0 lb VHAP/lb solids thinners - 3.0% by weight VHAP

- ii. Compliance Procedures and Monitoring Requirements - The Permittee shall demonstrate for emissions sources (NO EQUIPMENT SELECTED) that only compliant thinners are used and that all stains, washcoats, sealers, topcoats, basecoats, and enamels, are compliant, as applied, in accordance with 40 CFR 63.804(g)(2) for non-continuous coaters and 40 CFR 63.804(g)(3) for continuous coaters, as applicable.

- iii. Compliance Procedures and Monitoring Requirements - Emissions sources (NO EQUIPMENT SELECTED) are using both non-continuous and continuous coaters. The Permittee shall demonstrate that only compliant thinners are used and that all stains, washcoats, sealers, topcoats, basecoats, and enamels, are compliant, as applied, in accordance with 40 CFR 63.804(g)(2) for non-continuous coaters and 40 CFR 63.804(g)(3) for continuous coaters.
- iv. Compliance Procedures and Monitoring Requirements - Emission sources (NO EQUIPMENT SELECTED) are using non-continuous coaters. The Permittee shall demonstrate that only compliant thinners are used and that all stains, washcoats, sealers, topcoats, basecoats, and enamels, are compliant, as applied, in accordance with 40 CFR 63.804(g)(2).
- v. Performance Test Method - EPA Method 311 [Appendix A of 40 CFR Part 63] shall be used to determine the VHAP content of liquid coatings in accordance with 40 CFR 63.805(a).
- vi. Recordkeeping Requirements - The Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40 CFR 63.800(d), 40 CFR 63.804(g)(2), 40 CFR 63.806(b)(1) and (b)(2), 40 CFR 63.806(h), 40 CFR 63.806(i), and 40 CFR 63.806(j).
- vii. Reporting Requirements - The Permittee shall submit the compliance status report to the Regional Supervisor by in accordance with 40 CFR 63.804(f)(2) and 40 CFR 63.807(b). The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(2) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- viii. Reporting Requirements - The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(1) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- h. Finishing Operations - Per 40 CFR 63.804(a)(4), the Permittee has chosen to use both the **compliant coatings** and the **facility averaging** compliance options for the finishing operations (NO EQUIPMENT SELECTED). Compliance with each of these options is considered a separate **ALTERNATIVE OPERATING SCENARIO (AOS)** and the Permittee, contemporaneously with making a change from one AOS to another, shall record in a log the scenario under which it is operating. Records shall be retained for five years. [15A NCAC 2Q .0508(p)]

AOS1: Compliant Coatings Option

- i. Emission Limits - The Permittee shall comply with all provisions of 40 CFR 63.802(a)(1) and 63.804(a)(2) as applicable to the finishing operations (NO EQUIPMENT SELECTED). All thinners, stains, washcoats, sealers, topcoats, basecoats, and enamels used at the facility shall meet the emission limitations as detailed in the following table:

Regulated Material	Emission Limitation
Thinners	10% by weight HAP
stains, washcoats, sealers, topcoats, basecoats, and enamels	1.0 lb VHAP/lb solids, as applied
washcoat, basecoat, or enamel formulated onsite	coatings - 1.0 lb VHAP/lb solids thinners - 3.0% by weight VHAP

- ii. Compliance Procedures and Monitoring Requirements - Emission sources (NO EQUIPMENT SELECTED) are using both non-continuous and continuous coaters. The Permittee shall demonstrate that only compliant thinners are used and that all stains, washcoats, sealers, topcoats, basecoats, and enamels, are compliant, as applied, in accordance with 40 CFR 63.804(g)(2) for non-continuous coaters and 40 CFR 63.804(g)(3) for continuous coaters.
- iii. Compliance Procedures and Monitoring Requirements - Emission sources (NO EQUIPMENT SELECTED) are using non-continuous coaters. The Permittee shall demonstrate that only compliant thinners are used and that all stains, washcoats, sealers, topcoats, basecoats, and enamels, are compliant, as applied, in accordance with 40 CFR 63.804(g)(2).
- iv. Performance Test Method - EPA Method 311 [Appendix A of 40 CFR Part 63] shall be used to determine the VHAP content of liquid coatings in accordance with 40 CFR 63.805(a).
- v. Recordkeeping Requirements - The Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40 CFR 63.800(d), 40 CFR 63.804(g)(2), 40 CFR 63.806(b)(1) and (b)(2), 40 CFR 63.806(h), 40 CFR 63.806(i), and 40 CFR 63.806(j).
- vi. Reporting Requirements - The Permittee shall submit the compliance stats report to the Regional Supervisor by in accordance with 40 CFR 63.804(f)(7) and 40 CFR 63.807(b). The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(7) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- vii. Reporting Requirements - The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(2) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).

AOS2: Facility Averaging Option

- viii. Emission Limits - The Permittee shall comply with all provisions of 40 CFR 63.802(a)(1) and 63.804(a)(1) as applicable to the finishing operations (NO

EQUIPMENT SELECTED). The weighted average VHAP content across all coatings, as applied, shall not exceed 1.0 kg VHAP per kg solids.

- ix. Compliance Procedures and Monitoring Requirements - The Permittee shall demonstrate that the monthly average VHAP content for all finishing materials used at the facility is no greater than 1.0 kg VHAP per kg solids, as applied, in accordance with 40 CFR 63.803(g)(1).
- x. Performance Test Method - EPA Method 311 [Appendix A of 40 CFR Part 63] shall be used to determine the VHAP content of liquid coatings in accordance with 40 CFR 63.805(a).
- xi. Recordkeeping Requirements - Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40 CFR 63.800(d), 40 CFR 63.804(g)(1), 40 CFR 63.806(b)(1) and (b)(2), 40 CFR 63.806(c), 40 CFR 63.806(h), 40 CFR 63.806(i), and 40 CFR 63.806(j).
- xii. Reporting Requirements - The Permittee shall submit the compliance status report to the Regional Supervisor by in accordance with 40 CFR 63.804(f)(7) and 40 CFR 63.807(b). The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(7) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- xiii. Reporting Requirements - The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(1) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- i. Cleaning Operations -
 - i. Emission Limits - The Permittee shall comply with the limits of 40 CFR 63.802(a)(3) applicable to the strippable spray booth operations (NO EQUIPMENT SELECTED) as detailed in the following table:

Regulated Material	Emission Limitation
strippable spray booth coatings	0.8 lb VOC per lb solids, as applied

- ii. Compliance Procedures and Monitoring Requirements - When the emission source is using foam and other contact adhesives, the Permittee shall demonstrate that only compliant adhesives are used in accordance with 40 CFR 63.804(g)(5).
- iii. Performance Test Method - EPA Method 311 [Appendix A of 40 CFR Part 63] shall be used to determine the VHAP content of liquid coatings in accordance with 40 CFR 63.805(a).
- iv. Recordkeeping Requirements - The Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40

CFR 63.800(d), 40 CFR 63.806(b)(1) and (b)(3), 40 CFR 63.806(h), 40 CFR 63.806(i), and 40 CFR 63.806(j).

- v. Reporting Requirements - The Permittee shall submit the compliance status report to the Regional Supervisor by in accordance with 40 CFR 63.804(f)(7) and 40 CFR 63.807(b). The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(1) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- vi. Reporting Requirements - The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(7) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- j. Contact Adhesive Operations -
 - i. Emission Limits - The Permittee shall comply with all provisions of 40 CFR 63.802(a)(2) and 63.804(b) and (c) as applicable to the contact adhesive operations (NO EQUIPMENT SELECTED) as detailed in the following table:

Regulated Material	Emission Limitation
foam contact adhesives used in products which meet flammability requirements per California Technical Bulletin 116, 117, or 133, the Business and Institutional Furniture Manufacturers Association's (BIFMA's) X5.7, UFAC flammability testing, or any similar requirements from local, State, or Federal fire regulatory agencies	1.8 lb VHAP per lb solids, as applied
all other contact adhesives	1.0 lb VHAP/lb solids, as applied

- ii. Compliance Procedures and Monitoring Requirements - When the (NO EQUIPMENT SELECTED) is using foam and other contact adhesives. The Permittee shall demonstrate that only compliant thinners are used and that all stains, washcoats, sealers, topcoats, basecoats, and enamels, are compliant, as applied, in accordance with 40 CFR 63.804(g)(5).
- iii. Performance Test Method - EPA Method 311 [Appendix A of 40 CFR Part 63] shall be used to determine the VHAP content of liquid coatings in accordance with 40 CFR 63.805(a).
- iv. Recordkeeping Requirements - The Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40 CFR 63.800(d), 40 CFR 63.806(b)(1) and (b)(2), 40 CFR 63.806(h), 40 CFR 63.806(i), and 40 CFR 63.806(j).

- v. Reporting Requirements - The Permittee shall submit the compliance status report to the Regional Supervisor by in accordance with 40 CFR 63.804(f)(5) and 40 CFR 63.807(b). The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(5) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).
- vi. Reporting Requirements - The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(5) and 40 CFR 63.807(c). The Permittee shall follow the reporting requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).

k. Formaldehyde Requirements – The permittee shall comply with one of the following two options by November 21, 2014 and thereafter:

i. Option #1 (400 pounds formaldehyde limit per rolling 12 month period) –

A. Emissions Limits – In accordance with 40 CFR 63.802(a) and (b), limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period.

B. Compliance Procedures and Monitoring Requirements – In accordance with 40 CFR 63.804(h), calculate total formaldehyde emissions from all finishing materials and contact adhesives used at the facility using Equation 5 and maintain a value of F_{total} no more than 400 pounds per rolling 12 month period.

C. Recordkeeping Requirements – In accordance with 40 CFR 63.806(b), the Permittee shall keep records of the formaldehyde content, in pounds per gallon, as applied, of each finishing material and contact adhesive subject to the emission limits of 40 CFR 63.802(a) and (b).

D. Reporting Requirements - The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 63.807(c).

ii. Option#2 (CPDS \leq 1.0% by weight formaldehyde) –

A. Emissions Limits – In accordance with 40 CFR 63.802(a) and (b), use coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives, in any wood furniture manufacturing operations. *Low-formaldehyde* means, 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 material.

B. Compliance Procedures and Monitoring Requirements – In accordance with 40 CFR 63.804(h), demonstrate compliance by use

of coatings and contact adhesives only if they are *low-formaldehyde* coatings and contact adhesives maintaining a certified product data sheet for each coating and contact adhesive used and submitting a compliance certification with the semi-annual report.

C. Recordkeeping Requirements – In accordance with 40 CFR 63.806(b), the Permittee shall keep a certified product data sheet for each coating and contact adhesive used.

D. Reporting Requirements - The Permittee shall submit semi-annual reports to the Regional Supervisor in accordance with 40 CFR 40 CFR 63.807(c) and 40 CFR 63.804(h). The compliance certification shall state 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. An affected source is in violation of the standard whenever a coating or contact adhesive that is not low-formaldehyde, as demonstrated by records or by a sample of the coating or contact adhesive, is used. Use of a noncompliant coating or contact adhesive is a separate violation for each day the noncompliant coating or contact adhesive is used. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.