

**Permit #:** 28.4401-01  
**Effective Date:** June 21, 2007  
**Expiration Date:** June 21, 2012

The seal of the State of South Dakota is a circular emblem with a serrated outer edge. It features a central landscape scene with a river, a windmill, and a plow. The text "STATE OF SOUTH DAKOTA" is arched across the top, and "GREAT SEAL" is arched across the bottom. The year "1889" is at the bottom center. A banner across the middle reads "UNDER GOD THE PEOPLE RULE".

**SOUTH DAKOTA DEPARTMENT OF  
ENVIRONMENT AND NATURAL RESOURCES  
TITLE V AIR QUALITY PERMIT**

A handwritten signature in black ink, appearing to read "S. Pirner".

Steven M Pirner, Secretary  
Department of Environment and Natural Resources

**Under the South Dakota Air Pollution  
Control Regulations**

Pursuant to Chapter 34A-1-21 of the South Dakota Codified Laws and the Air Pollution Control Regulations of the State of South Dakota and in reliance on statements made by the owner designated below, a permit to operate is hereby issued by the Secretary of the Department of Environment and Natural Resources. This permit authorizes such owner to operate the unit(s) listed in Table 1-1 under the listed conditions.

**A. Owner**

**1. Company Name and Mailing Address**

StarMark Cabinetry a division of Norcraft Companies, LP  
600 E 48th Street North  
Sioux Falls, South Dakota 57104

**2. Actual Source Location if Different from Above**

Not Applicable

**3. Permit Contact**

Pete Bendix, Vice President Operations  
(605) 336-5568

**4. Facility Contact**

Pete Bendix, Vice President Operations  
(605) 336-5568

**5. Responsible Official**

John Swedeen, President  
(605) 336-5595

**B. Permit Revisions or Modifications**

Not Applicable

**C. Type of Operation**

Manufacturer bathroom and kitchen cabinets

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## 1.0 STANDARD CONDITIONS

**1.1 Construction and operation of source.** In accordance with Administrative Rules of South Dakota (ARSD) 74:36:05:16.01(8) and ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(r)(1), the owner or operator shall construct and operate the units, controls, and processes as described in Table 1-1 in accordance with the statements, representations, and supporting data contained in the complete permit application submitted and dated November 28, 1994, March 11, 2002, and November 16, 2004, unless modified by the conditions of this permit. The control equipment shall be operated in manner that achieves compliance with the conditions of this permit at all times. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

*Table 1-1 – Description of Permitted Units, Operations, and Processes*

Unit	Description	Maximum Operating Rate	Control Device
<b>Existing Equipment</b>			
#1	Various powered hand tools and table mounted equipment	Not applicable	1988 Pneumafil baghouse with a flow rate of 30,000 cubic feet per minute. This baghouse may be replaced during the term of this permit.
#2	Various powered hand tools and table mounted equipment	Not applicable	1998 MAC baghouse with a flow rate of 30,000 cubic feet per minute. This baghouse may be replaced during the term of this permit.
#3	Various powered hand tools and table mounted equipment	Not applicable	1979 Torit baghouse with a flow rate of 13,400 cubic feet per minute. This baghouse may be replaced during the term of this permit.
#4	Fines collected from baghouse associated with Unit #1 and wood waste grinder	Not applicable	1994 Torit baghouse with a flow rate of 1,200 cubic feet per minute. This baghouse may be replaced during the term of this permit.
#5	Walkthrough Line - Paint Arrestor (model # CPEF-16-8-T-LH) and JBI (model #IDB-167) spray booths.	Not applicable	Blanket style filter system
#6	Line One – Dynaprecipitor	Not applicable	Blanket style filter system

<b>Unit</b>	<b>Description</b>	<b>Maximum Operating Rate</b>	<b>Control Device</b>
	(model #CWE 10-8-T-LH), Paint Arrestor (model #CPEF 12-9-T-LH), No Pump (model #CNPB 12-10-T-LH), and Paint Arrestor (model # CPEF 16-7-T-LH) spray booths.		
<b>#7</b>	Line Two – Nopump (model #CNPB 10-8-T-LH), Paint Arrestor (model # CPEF 12-9-T-LH), Paint Arrestor (model #CPEF 12-9-T-LH), and Paint Arrestor (model #CPEF 16-7-T-LH) spray booths.	Not applicable	Blanket style filter system
<b>#8</b>	Line Three –Nopump (model #CNPB 12-8-T-LH), two Paint Arrestor (model #CPEF 12-9-T-LH), Paint Arrestor (model #CPEF 16-7-T-LH), and Dynaprecipitor (model #SP-CWE 16-8-T-LH) spray booths.	Not applicable	Blanket style filter system
<b>#9</b>	Walkthrough Line – Dynaprecipitor (model #CWE 10-8-T-LH) spray booth.	Not applicable	Blanket style filter system
<b>New Equipment</b>			
<b>#10</b>	During the term of this permit the equipment and processes associated with Unit #1, #2, #3, and #4 may be ducted to the baghouse associated with this Unit #10.	Not applicable	Donaldson baghouse with a flow rate of 68,200 cubic feet per minute. This baghouse may be installed during the term of this permit to replace the baghouse associated with Unit #1, #2, #3, and/or #4.
<b>#11</b>	During the term of this permit the equipment and processes associated with Unit #1, #2, #3, and #4 may be ducted to the baghouse associated with this Unit #11.	Not applicable	Donaldson baghouse with a flow rate of 68,200 cubic feet per minute. This baghouse may be installed during the term of this permit to replace the baghouse associated with Unit #1, #2, #3, and/or #4.

**1.2 Duty to comply.** In accordance with ARSD 74:36:05:16.01(12), the owner or operator shall comply with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of a permit renewal application. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit.

**1.3 Duty to comply with other applicable requirements.** In accordance with 74:36:09:02, as referenced to 40 C.F.R. § 52.21(r)(3) the approval to construct shall not relieve the owner or operator of the responsibility to comply fully with applicable local, state or federal law.

**1.4 Property rights or exclusive privileges.** In accordance with ARSD 74:36:05:16.01(12), the State's issuance of this permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant that the owner's or operator's compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations. The owner or operator is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, which may result from actions taken under the permit.

**1.5 Penalty for violating a permit condition.** In accordance with South Dakota Codified Laws (SDCL) 34A-1, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, a state penalty of not more than \$10,000 per day per violation, injunctive action, administrative permit action, and other remedies as provided by law.

**1.6 Inspection and entry.** In accordance with SDCL 34A-1-41, the owner or operator shall allow the Secretary to:

1. Enter the premises where a regulated activity is located or where pertinent records are stored;
2. Have access to and copy any records that are required under this permit;
3. Inspect operations regulated under this permit; and/or
4. Sample or monitor any substances or parameters for the purpose of assuring compliance.

**1.7 Severability.** In accordance with ARSD 74:36:05:16.01(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

**1.8 Permit termination, modification, or revocation.** In accordance with ARSD 74:36:05:46, the Secretary may recommend that the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of SDCL 34A-1 or the federal Clean Air Act or for nonpayment of any outstanding fee or enforcement penalty.

**1.9 Credible evidence.** In accordance with ARSD 74:36:13:07, credible evidence may be used for the purpose of establishing whether the owner or operator has violated or is in violation of this permit. Credible evidence is as follows:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at the source:
  - a. A monitoring method approved for the source pursuant to 40 CFR § 70.6(a)(3) and incorporated in this permit; or
  - b. Compliance methods specified in an applicable plan;
2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
  - a. Any monitoring or testing methods approved in this permit, including those in 40 CFR Parts 51, 60, 61, and 75; or
  - b. Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in section (1) or (2)(a).

## **2.0 PERMIT FEES**

**2.1 Annual air fee required.** In accordance with ARSD 74:36:05:06.01, the owner or operator shall submit an annual administrative fee and an annual fee. The fee is based on actual emissions in accordance with ARSD 74:37.

**2.2 Annual operational report.** In accordance with ARSD 74:37:01:06, the Secretary will supply the owner or operator with an annual operational report in January of each year. The owner or operator shall complete and submit the operational report to the Secretary by March 1 of each year. The responsible official shall sign the operational report in the presence of a notary public.

**2.3 Annual air fee.** In accordance with ARSD 74:37:01:08, the Secretary will notify the owner or operator of the required annual air emission fee and administrative fee by June 1 of each year. The fees shall accrue on July 1 and are payable to the Department of Revenue by July 31 of each year.

### 3.0 PERMIT AMENDMENT AND MODIFICATION CONDITIONS

**3.1 Permit flexibility.** In accordance with ARSD 74:36:05:30, the owner or operator shall have the flexibility to make changes to the source during the term of this permit. The owner or operator shall provide the Secretary written notice at least seven days in advance of the proposed change (NOTE: The Secretary will forward a copy of the written notice to EPA). The written notice shall include a brief description of the change, the date on which the change is to occur, any change in emissions, and the proposed changes to this permit.

The Secretary will notify the owner or operator whether the change is an administrative permit amendment, a minor permit amendment, or a permit modification. A proposed change that is considered an administrative permit amendment or a minor permit amendment can be completed immediately after the Secretary receives the written notification. The owner or operator must comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Secretary takes final action on the proposed change.

A proposed change that is considered a modification can not be constructed until the Secretary takes final action on the proposed change. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

**3.2 Administrative permit amendment.** In accordance with ARSD 74:36:05:33, the Secretary has 60 days from receipt of a written notice to verify that the proposed change is an administrative permit amendment. The Secretary considers a proposed change an administrative permit amendment if the proposed change accomplishes one of the following:

1. Corrects typographical errors;
2. Changes the name, address, or phone number of any person identified in this permit or provides a similar minor administrative change at the source;
3. Requires more frequent monitoring or reporting by the source;
4. The ownership or operational control of a source change and the Secretary determines that no other change in this permit is necessary. However, the new owner must submit a certification of applicant form and a written statement specifying the date for transfer of operating permit responsibility, coverage, and liability; or
5. Any other changes that the Secretary and the administrator of EPA determines to be similar to those requirements in this condition.

**3.3 Minor permit amendment.** In accordance with ARSD 74:36:05:38, the Secretary has 90 days from receipt of a written notice or 15 days after the end of EPA's 45-day review period, whichever is later, to take final action on a minor permit amendment. Final action consists of issuing or denying a minor permit amendment or determining that the proposed change is a permit modification. The Secretary considers a proposed change to be a minor permit amendment if the proposed change:

1. Does not violate any applicable requirements;
2. Does not involve significant changes to existing monitoring, reporting, or record keeping requirements;
3. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

**3.4 Permit modification.** In accordance with ARSD 74:36:05:39, an owner or operator may apply for a permit modification. A permit modification is any proposed change that meets the definition of a modification in ARSD 74:36:01:10 or is not an administrative amendment or a minor permit amendment. Modification is defined as a physical change or change in operation that increases the amount of air pollutant emitted by the source or results in the emission of an air pollutant not previously emitted. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

**3.5 Permit revision.** In accordance with ARSD 74:36:05:40, the Secretary may reopen and revise this permit to meet requirements of SDCL 34A-1 or the federal Clean Air Act.

**3.6 Testing new fuels or raw materials.** In accordance with ARSD 74:36:11:04, an owner or operator may request permission to test a new fuel or raw material to determine if it is compatible with existing equipment before requesting a permit amendment or modification. A complete test proposal shall consist of the following:

1. A written proposal that describes the new fuel or raw material, operating parameters, and parameters that will be monitored and any testing associated with air pollutant emissions during the test;
2. An estimate of the type and amount of regulated air pollutant emissions that will result from the proposed change; and
3. The proposed schedule for conducting the test. In most cases the owner or operator will be allowed to test for a maximum of one week. A request for a test period longer than one week will need additional justification. A test period shall not exceed 180 days.

The Secretary shall approve, conditionally approve, or deny in writing the test proposal within 45 days after receiving a complete proposal. Approval conditions may include changing the test schedule or pollutant sampling and analysis methods. Pollutant sampling and analysis methods may include, but are not limited to performance testing, visible emission evaluation, fuel analysis, dispersion modeling, and monitoring of raw material or fuel rates.

If the Secretary determines that the proposed change will result in an increase in the emission of a regulated air pollutant or result in the emission of an additional regulated air pollutant, the Secretary shall give public notice of the proposed test for 30 days. The Secretary shall consider all comments received during the 30-day public comment period before making a final decision on the test.

The Secretary will not approve a test if the test would cause or contribute to a violation of a national ambient air quality standard.

#### **4.0 PERMIT RENEWAL REQUIREMENTS**

**4.1 Permit effective.** In accordance with ARSD 74:36:05:07, this permit shall expire five years from date of issuance unless reopened or terminated for cause.

**4.2 Permit renewal.** In accordance with ARSD 74:36:05:08, the owner or operator shall submit an application for a permit renewal at least 180 days before the date of permit expiration if the owner or operator wishes to continue an activity regulated by this permit. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the timely permit renewal application.

**4.3 Permit expiration.** In accordance with ARSD 74:36:05:28, permit expiration terminates the owner's or operator's right to operate any unit covered by this permit.

#### **5.0 RECORD KEEPING AND REPORTING REQUIREMENTS**

**5.1 Record keeping and reporting.** In accordance with ARSD 74:36:05:16.01(9) and ARSD 74:36:08:14, as referenced to 40 CFR § 63.10(b)(1), the owner or operator shall maintain all monitoring data, records, reports, and pertinent information specified by this permit for five years from the date of sample, measurement, report, or application. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. All records must be made available to the Secretary for inspection. All notifications and reports shall be submitted to the following address:

South Dakota Department of Environment and Natural Resources  
PMB 2020, Air Quality Program  
523 E. Capitol, Joe Foss Building  
Pierre, SD 57501-3182

**5.2 Signatory requirements.** In accordance with ARSD 74:36:05:12 and ARSD 74:36:05:16.01, all applications submitted to the Secretary shall be signed and certified by a responsible official. A responsible official for a corporation is a responsible corporate officer and for a partnership or sole proprietorship is a general partner or the proprietor, respectively. All

reports or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Secretary; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

The responsible official shall notify the Secretary if an authorization is no longer accurate. The new duly authorized representative must be designated prior to or together with any reports or information to be signed by a duly authorized representative.

**5.3 Certification statement.** In accordance with ARSD 74:36:05:16.01(14)(a), all documents required by this permit, including application forms, reports, and compliance certification, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

“I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document and all attachments are true, accurate, and complete.”

**5.4 Monitoring log.** In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain the following information in a monitoring log:

1. Maintenance schedule for each piece of control equipment listed in Table 1-1. At a minimum, the maintenance schedule shall meet the manufacturer’s recommended schedule for maintenance or equivalent, which represents best management practices. The following information shall be recorded for maintenance:
  - a. Identify the unit;
  - b. The date and time maintenance was performed;
  - c. Description of the type of maintenance;
  - d. Reason for performing maintenance;
  - e. Signature of person performing maintenance; and
2. The following information shall be recorded within two days of each emergency exceedance:
  - a. The date of the emergency exceedance and the date the emergency exceedance was reported to the Secretary;
  - b. The cause(s) of the emergency;
  - c. The reasonable steps taken to minimize the emissions during the emergency;
  - d. A statement that the permitted equipment was at the time being properly operated.

**5.5 Monthly records.** In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall record the amount of particulate matter collected from Unit #10 and #11, in tons, and the amount of particulate matter less than or equal to 10 microns in diameter (PM10) emitted into the ambient air from Unit #10 and #11, in tons, each month. A 12-month rolling total of the amount of PM10 emitted shall be calculated every month using that month's value and the previous 11 months' values. The amount of PM10 emitted to the ambient air from Unit #10 and #11 shall be calculated using formulas, emission factors, and methods approved by the Secretary. This permit condition is no longer applicable once the existing baghouses are removed and all processes are routed to the two new baghouses.

**5.6 Annual records.** In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall calculate and record the following amounts from January 1 to December 31 of each year:

1. The amount of hazardous air pollutants emitted from the spray booths. The hazardous air pollutant emissions shall be based on the amount of products used and the composition of the product based on the material safety data sheets, manufacturer supplied formulation data, certified product data sheets, EPA approved test method data, or a method approved by the Secretary;
2. The amount of volatile organic compounds emitted from the spray booths. The volatile organic compound emissions shall be based on the amount of products used and the composition of the product based on the material safety data sheets, manufacturer supplied formulation data, certified product data sheets, EPA approved test method data, or a method approved by the Secretary; and
3. The amount of particulate matter emitted from the permitted units.

**5.7 Initial notification.** In accordance with ARSD 74:36:06:16.01(9), the owner or operator shall notify the Secretary of the date the baghouse is operational for Unit #10 and #11. The notification shall be postmarked no later than 30 days after the baghouse is operational. The baghouse is operational when exhaust from the various powered hand tools and table mounted equipment is first passed through the baghouse.

**5.8 Semiannual report.** In accordance with ARSD 74:36:06:16.01(9), the owner or operator shall submit a semiannual report to the Secretary by the end of each calendar semiannual period. The semiannual report shall contain the following information:

1. Name of facility, permit number, reference to this permit condition, identifying the submittal as a semi annual report, and calendar dates covered in the reporting period; and
2. The quantity of particulate matter less than 10 microns or less emitted, in tons, in each month and the 12-month rolling total for each month in the reporting period and supporting documentation.

The semiannual reports must be postmarked no later than 30 days after the end of the reporting period (i.e., July 30<sup>th</sup> and January 30<sup>th</sup>). This permit condition is no longer applicable once the existing baghouses are removed and all processes are routed to the two new baghouses.

**5.9 Annual compliance certification.** In accordance with ARSD 74:36:05:16.01(14), the owner or operator shall submit an annual compliance certification letter to the Secretary by March 1 of each year this permit is in effect (NOTE: The Secretary will forward a copy of the certification letter to EPA). The certification shall contain the following information:

1. Methods used to determine compliance, including: monitoring, record keeping, performance testing and reporting requirements;
2. The source is in compliance and will continue to demonstrate compliance with all applicable requirements;
3. In the event the source is in noncompliance, a compliance plan that indicates how the source has or will be brought into compliance; and
4. Certification statement required in permit condition 5.3.

**5.10 Reporting permit violations.** In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-5286.

A written report shall be submitted within five days of discovering the permit violation. Upon prior approval from the Secretary, the submittal deadline for the written report may be extended up to 30 days. The written report shall contain:

1. Description of the permit violation and its cause(s);
2. Duration of the permit violation, including exact dates and times; and
3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

## **6.0 CONTROL OF REGULATED AIR POLLUTANTS**

**6.1 Visibility limit.** In accordance with ARSD 74:36:12:01, the owner or operator may not discharge into the ambient air an air contaminant of a density equal to or greater than that designated as 20 percent opacity from any permitted unit, operation, or process listed in Table 1-1. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

**6.2 Visibility exceedances.** In accordance with ARSD 74:36:12:02, an exceedance of the operating limit in permit condition 6.1 is not considered a violation during brief periods of soot blowing, start-up, shutdown, or malfunctions. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal

or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator of the source is not a malfunction and is considered a violation.

**6.3 Baghouse particulate matter limit.** In accordance with ARSD 74:36:05:16.01(8), the owner or operator shall not emit into the ambient air greater than or equal to 14.3 tons of particulate matter less than or equal to 10 microns in diameter (PM10) per 12-month rolling period from Units #10 and #11. The permit issuance date is the first month of the 12-month rolling period.

A short term limit is established in Table 6-1 along with the record keeping and reporting requirements of this permit to ensure that the long term limit of 14.3 tons per 12-month period is not exceeded.

**Table 6-1 – PM10 Short Term Limit**

<b>Unit</b>	<b>Description</b>	<b>PM10 Short Term Limit</b>
<b>#1</b>	Various powered hand tools and table mounted equipment	0.01 grains per dry standard cubic foot
<b>#2</b>	Various powered hand tools and table mounted equipment	0.01 grains per dry standard cubic foot
<b>#3</b>	Various powered hand tools and table mounted equipment	0.01 grains per dry standard cubic foot
<b>#4</b>	Various powered hand tools and table mounted equipment	0.01 grains per dry standard cubic foot
<b>#10</b>	Various powered hand tools and table mounted equipment	0.01 grains per dry standard cubic foot
<b>#11</b>	Various powered hand tools and table mounted equipment	0.01 grains per dry standard cubic foot

The 14.3 tons per 12-month rolling period limitation no longer applies once the existing baghouses are removed and all processes are routed to the two new baghouses. However, the PM10 short term limits in Table 6-1 are still applicable.

**6.4 High volume low pressure application techniques.** In accordance with 74:36:09:02 as referenced to §52.21(j) the owner or operator shall apply the use of high solids topcoat and sealer with high volume low pressure (HVLP) application techniques.

**6.5 Air emission exceedances -- emergency conditions.** In accordance with ARSD 74:36:05:16.01(18), the Secretary will allow for an unavoidable emission exceedance of a technology-based emission limit if the exceedance is caused by an emergency condition and immediate action is taken by the owner or operator to restore the operations back to normal. An emergency condition is a situation arising from a sudden and reasonably unforeseeable event beyond the control of the source, including acts of God. An emergency shall not include an

emission exceedance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. The owner or operator shall notify the Secretary within two working days of the incident and take all steps possible to eliminate the excess emissions. The notification must provide a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. If the notification is submitted orally, a written report summarizing the information required by the notification shall be submitted and postmarked within 30 days of the oral notification.

**6.6 Circumvention not allowed.** In accordance with ARSD 74:36:05:47.01 and ARSD 74:36:08:03, as referenced to 40 CFR § 63.4(b), the owner or operator may not install, use a device, or use a means that conceals or dilutes an air emission that would otherwise violate this permit. This includes operating a unit or control device that emits air pollutants from an opening other than the designed stack, vent, or equivalent opening.

**6.7 Minimizing emissions.** In accordance with ARSD 74:36:08:01, as referenced to 40 CFR § 63.6(e), the owner or operator shall at all times, when practicable, maintain and operate all permitted units in a manner that minimizes air pollution emissions.

## **7.0 PERFORMANCE TESTS**

**7.1 Performance test may be required.** In accordance with ARSD 74:36:11:02, the Secretary may request a performance test during the term of this permit. A performance test shall be conducted while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary. A performance test conducted while operating less than 90 percent of its maximum design capacity will result in the operation being limited to the percent achieved during the performance test. The Secretary has the discretion to extend the deadline for completion of performance test required by the Secretary if circumstances reasonably warrant but will not extend the deadline past a federally required performance test deadline.

**7.2 Test methods and procedures.** The owner or operator shall conduct the performance test in accordance with 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The Secretary may approve an alternative method if a performance test specified in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M is not federally applicable or federally required.

**7.3 Representative performance test.** In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.8(c), performance tests shall be conducted under such conditions as the Secretary shall specify to the owner or operator based on the representative performance of the unit being tested. The owner or operator shall make available to the Secretary such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable

emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in this permit.

**7.4 Submittal of test plan.** In accordance with ARSD 74:36:11:01, the owner or operator shall submit the proposed testing procedures to the Secretary at least 30 days prior to any performance test. The Secretary will notify the owner or operator if the proposed test procedures are approved or denied. If the proposed test procedures are denied, the Secretary will provide written notification that outlines what needs to be completed for approval.

**7.5 Notification of test.** In accordance with ARSD 74:36:11:03, the owner or operator shall notify the Secretary at least 10 days prior to the start of a performance test to arrange for an agreeable test date when the Secretary may observe the test. The Secretary may extend the deadline for the performance test in order to accommodate schedules in arranging an agreeable test date.

**7.6 Performance test report.** In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date designated by the Secretary. The performance test report shall contain the following information:

1. A brief description of the process and the air pollution control system being tested;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
7. Raw data sheets for field sampling and field and laboratory analyses;
8. Documentation of calculations;
9. All data recorded and used to establish parameters for compliance monitoring; and
10. Any other information required by the test method.

**7.7 Determination of volatile hazardous air pollutant content.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.805(a), 40 CFR Part 63, Appendix A, Method 311 shall be used in conjunction with formulation data to determine the volatile hazardous air pollutant content of the liquid coating. Formulation data shall be used to identify volatile hazardous air pollutant present in the coating. Method 311 shall then be used to quantify those volatile hazardous air pollutants identified through formulation data. If Method 311 test data is a higher value than the facility's formulation data then the Method 311 test value shall govern unless the owner or operator can demonstrate to the satisfaction of the Secretary that the formulation data is correct.

**7.8 Determination of solids content.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.805(a), 40 CFR Part 60, Appendix A, Method 24 shall be used to determine the solids content by weight and the density of coatings. If it is demonstrated to the satisfaction of the Secretary that a coating does not release volatile organic compound or hazardous air pollutant byproducts during the cure, then batch formulation information shall be accepted. If Method 24 test data is a higher value than the facility’s formulation data then the Method 24 test value shall govern unless the source can demonstrate to the satisfaction of the Secretary that the formulation data is correct.

**7.9 Performance tests for Unit #10 and #11.** In accordance with ARSD 74:36:11:02, the owner or operator shall conduct an initial performance test on Units #10 and #11 within one year after initial startup of the baghouse associated with the appropriate unit. The performance tests shall be conducted on the outlet of the control equipment to determine particulate emission rates and demonstrate compliance with emission limits.

A second performance test shall be conducted on Unit #10 and #11 within two years after the initial startup of the baghouse or after all equipment is attached to the baghouse associated with the appropriate unit, whichever comes first. The performance tests shall be conducted on the inlet and outlet of the control equipment to determine the control efficiency of the baghouse, the particulate emission rate, and demonstrate compliance with emission limits.

The particulate matter performance tests shall determine both the total suspended particulate and particulate less than or equal to 10 microns in diameter (PM10). The owner or operator may use the total suspended particulate performance test results as the result for the PM10 performance test if the total suspended particulate test demonstrates compliance with PM10 emissions limit.

## **8.0 WOOD FURNITURE MANUFACTURING OPERATIONS**

**8.1 Limits for finishing operations.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR §§ 63.802(a)(1), the owner or operator shall limit volatile hazardous air pollutant emissions from finishing operations by meeting the limits presented in Table 8-1.

*Table 8-1 – Summary of Emission Limits*

<b>Emission Point</b>		<b>Limit</b>
<b>Finishing operations:</b>		
(a)	Achieve a weighted average volatile hazardous air pollutant content across all coatings (maximum pound of volatile hazardous air pollutant per pound of solids), as applied;	1.0 <sup>a</sup>
(b)	Use compliant finishing materials (maximum pound of volatile hazardous air pollutant per pound of solids), as applied:	
	i. Stains	1.0 <sup>a</sup>
	ii. Wash coats	1.0 <sup>a,b</sup>
	iii. Sealers	1.0 <sup>a</sup>

<b>Emission Point</b>	<b>Limit</b>
iv. Topcoats	1.0 <sup>a</sup>
v. Basecoats	1.0 <sup>a,b</sup>
vi. Enamels	1.0 <sup>a,b</sup>
vii. Thinners (maximum percent volatile hazardous air pollutant by weight allowable);	10.0
(c) As an alternative, use control device; or	1.0 <sup>c</sup>
(d) Use any combination of (a), (b), and (c).	1.0
<b>Cleaning Operations:</b>	
Strippable spray booth material (maximum pound of volatile organic compound per pound solids).	0.8
<b>Contact Adhesives:</b>	
(a) Use compliant contact adhesives ((maximum pound of volatile hazardous air pollutant per pound of solids, as applied) based on following criteria:	
i. For aerosol adhesives, and for contact adhesives applied to nonporous substrates;	d
ii. For foam adhesives used in products that meet flammability requirements;	1.8
iii. For all other contact adhesives (including foam adhesives used in products that do not meet flammability requirements); or	1.0
(b) Use a control device	1.0 <sup>e</sup>

<sup>a</sup> – The limits refer to the volatile hazardous air pollutant content of the coating, as applied;

<sup>b</sup> – Wash coats, basecoats, and enamels must comply with the limits presented in this table if they are purchased pre-made, that is, if they are not formulated onsite by thinning other finishing materials. If they are formulated onsite, they must be formulated using compliant finishing materials, i.e. those that meet the limits specified in this table, and thinners containing no more than 3.0 percent volatile hazardous air pollutant by weight;

<sup>c</sup> – The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram of volatile hazardous air pollutant being emitted from the affected emission source per kilogram of solids used;

<sup>d</sup> – There is no limit on the volatile hazardous air pollutant content of these adhesives; and

<sup>e</sup> – The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram of volatile hazardous air pollutant being emitted from the affected emission source per kilogram of solids used.

Compliance with the emission limits is demonstrated using the compliance methods in permit condition 8.2.

**8.2 Compliance procedures for finishing materials.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.804(a), the owner or operator shall demonstrate compliance with permit condition 8.1 using one of the following methods.

1. Calculate the average volatile hazardous air pollutant content for all finishing materials using Equation 8-1 and maintain a value of “E” no greater than 1.0;
2. Use compliant finishing materials in accordance with the following criteria:

- a. Demonstrate that each stain, sealer, and topcoat has a volatile hazardous air pollutant content of no more than 1.0 pounds volatile hazardous pollutant per pounds of solids, as applied, and each thinner contains no more than 10.0 percent volatile hazardous air pollutant by weight by maintaining certified product data sheets for each coating and thinner;
  - b. Demonstrate that each wash coat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a volatile hazardous air pollutant content of no more than 1.0 pounds volatile hazardous air pollutant per pound solids, as applied, and each thinner contains no more than 10.0 percent volatile hazardous air pollutant by weight by maintaining certified product data sheets for each coating and thinner; and
  - c. Demonstrate that each wash coat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 pounds volatile hazardous air pollutant per pound solids, as applied, and a thinner containing no more than 3.0 percent volatile hazardous air pollutant by weight; or
3. Use any combination of an averaging approach, as described in paragraph (1) and (2) of this permit condition.

**Equation 8-1**

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

Where:

- E = The emission limit achieved by an emission point or a set of emission points, in pound volatile hazardous air pollutant per pound solids;
- M = The mass of solids in a finishing material used monthly, in pound solids per month;
- C<sub>c</sub> = The volatile hazardous air pollutant content of a finishing material (c), in pounds of volatile hazardous air pollutant per pounds of coating solids, as applied;
- S = The volatile hazardous air pollutant content of a solvent, expressed as a weight fraction, added to finishing materials; and
- W = The amount of solvent, in pounds, added to finishing materials during the monthly averaging period.

**8.3 Limits for contact adhesives.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR §§ 63.802(a)(2)(ii) and 63.804(c), the owner or operator shall not exceed 1.0 pound of volatile hazardous air pollutant per pound of solids, as applied for all contact adhesives, excluding aerosol adhesives and contact adhesives applied to nonporous substrates. The owner or operator shall demonstrate compliance by using a compliant contact adhesive with volatile hazardous air pollutant content no greater than 1.0 pound volatile hazardous air pollutant per pound solids, as applied.

**8.4 Limits for strippable spray booth coatings.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.802(a)(3), the owner or operator shall limit volatile hazardous air

pollutant emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 pounds volatile organic compounds per pound solids, as applied.

**8.5 Monitoring.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.806(b), (c), and (d), the owner or operator shall maintain the following information:

1. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in this chapter;
2. The volatile hazardous air pollutant content, in pounds of volatile hazardous air pollutant per pound of solids, as applied, of each finishing material and contact adhesive subject to the emission limits in this chapter;
3. The volatile organic compound content, in pounds of volatile organic compound per pound of solids, as applied, of each strippable booth coating subject to the emission limits in this chapter;
4. A copy of the averaging calculation for each month and the data on the quantity of coatings and thinners used that is necessary to support the calculation of “E” in Equation 8-1;
5. If demonstrating compliance with permit condition 8.1 and applying coatings using continuous coaters, in addition to the records in paragraph (1), (2), and (3) in this permit condition, the owner or operator shall maintain the following records:
  - a. Solvent and coating additions to the continuous coater reservoir;
  - b. Viscosity measurements; and
  - c. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance; and
6. For each exceedance of the annual usage of a volatile hazardous air pollutant (VHAP) identified in the formulation assessment plan required in permit condition 9.14, the owner or operator shall record the amount of increase and the reasons for exceeding the baseline level.

**8.6 Semiannual report.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR §§ 63.804(g) and 63.807(c), the owner or operator shall submit a semiannual report to the Secretary with the appropriate information listed below based on the selected compliance option:

1. The owner or operator that complies with permit condition 8.1 by the procedures in permit condition 8.2 shall demonstrate continuous compliance by submitting the results of the averaging calculation for each month within that semiannual period. The compliance certification shall state that the value of “E”, as calculated by Equation 8-1 is not greater than 1.0. The owner or operator is in violation of this permit if “E” is greater than 1.0 for any month. A violation of the monthly average is a separate violation for each day of operation during the month, unless the owner or operator can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period;
2. The owner or operator that complies with permit condition 8.1 by the procedures in permit condition 8.2 shall state that compliant coatings and thinners are being used and maintain records that demonstrate the coatings and thinners are compliant. If noncompliant coatings

or thinners are used, the report shall identify the periods of noncompliance and the reasons for noncompliance. Each day a noncompliant coating or thinner is used is a single violation of if this permit;

3. The owner or operator that complies with permit condition 8.1 by procedures in permit condition 8.2 and are applying coatings using continuous coaters shall demonstrate continuous compliance by the following procedures:
  - a. Using compliant coatings, as determined by the volatile hazardous air pollutant content of the coating in the reservoir and the volatile hazardous air pollutant content as calculated from records, using compliant thinners, and submitting a compliance certification with this semiannual report. The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The owner or operator is in violation whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used; or
  - b. Using compliant coatings, as determined by the volatile hazardous air pollutant content of the coating in the reservoir, using compliant thinners, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with this semiannual report. The compliance certification shall state that compliant coatings, as determined by the volatile hazardous air pollutant content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period. The owner or operator is in violation when a sample of the as-applied coating exceeds the applicable limit established in permit condition 8.2, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating; and
  - c. The compliance certification for either procedure shall be signed by a responsible official.
4. The owner or operator that complies with permit condition 8.3 shall state that compliant contact or foam adhesives are being used or identify each day noncompliant contact or foam adhesives are used and the reasons for noncompliance. Each day a noncompliant contact or foam adhesive is used is a single violation of this permit;
5. The owner or operator subject to permit condition 8.4 shall state that compliant strippable spray booth coatings have been used each day or identify each day noncompliant strippable spray booth coatings are used and the reasons for noncompliance. Each day a noncompliant strippable booth coating is used is a single violation of this permit; and
6. The owner or operator shall include a statement 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 an owner or operator 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.

The semiannual reports must be postmarked no later than 30 days after the end of the reporting period (i.e., July 30<sup>th</sup> and January 30<sup>th</sup>). The semiannual report must be accompanied by a compliance certification that is signed by a responsible official. This semiannual report may be combined with the semiannual report required in permit condition 5.8.

## **9.0 WORK PRACTICE IMPLEMENTATION PLAN**

**9.1 Work practice implementation plan standards.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(a), the owner or operator shall maintain a written work practice implementation plan. The work practice implementation plan shall define environmentally desirable work practices for each wood furniture manufacturing operation and address each of the work practice standards presented in permit conditions 9.4 through 9.14, inclusive. If the work practice implementation plan is inadequate, the Secretary may require the owner or operator to modify the plan.

**9.2 Work practice implementation plan records.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.806(e), the owner or operator shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:

1. Records demonstrating that the operator training program required by permit condition 9.4 is in place;
2. Records collected in accordance with the inspection and maintenance plan required by permit condition 9.5;
3. Records associated with the cleaning solvent accounting system required by permit condition 9.6;
4. Records associated with the limit 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 as required by permit condition 9.10;
5. Records associated with the formulation assessment plan required by permit condition 9.14; and
6. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

**9.3 Reporting baseline level exceedance.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(l)(4) and (5) and 63.807(e), if the annual usage of a volatile hazardous air pollutant (VHAP) identified in the formulation assessment plan required in permit condition 9.14 exceeds the baseline level, then the owner or operator shall describe the amount of the increase and the reasons for exceeding the baseline level in the monitoring log required in permit condition 8.5. If the annual usage of a volatile hazardous air pollutant (VHAP) identified

in the formulation assessment plan required in permit condition 9.14 exceeds the baseline level and the appropriate de minimis level in Table 9-2 or 9-3, then the owner or operator shall provide written notification to the Secretary describing the amount of the increase and the reasons for exceeding the baseline level. The written notification shall be submitted to the Secretary no later than 30 calendar days after the end of the annual period in which the usage increase occurred. The following explanations would relieve the owner or operator from further action, unless the owner or operator is not in compliance with any other permit condition or requirements for that volatile hazardous air pollutant:

1. The exceedance is no more than 15.0 percent above the baseline level;
2. Usage of the volatile hazardous air pollutant is below the de minimis level presented in Table 9-2 for that volatile hazardous air pollutant; or
3. The source of the pollutant is a finishing material with a volatile organic compound content of no more than 1.0 pound volatile organic compound per pound solids, as applied.

The Secretary will notify the owner or operator if further action is necessary.

**9.4 Operator training course.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(b), the owner or operator shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and wash off operations; use the manufacturing equipment; or are responsible for implementation of the requirements in this permit. All personnel shall be trained upon hiring and given refresher training annually. The facility shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

1. A list of current personnel by name and job description that are required to be trained;
2. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
3. 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
4. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

**9.5 Inspection and maintenance plan.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(c), the owner or operator shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

1. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic solvents;
2. An inspection schedule;

3. Methods for documenting the date and results of each inspection and any repairs that were made; and
4. If a leak is detected, a first attempt at repair shall be made no later than five calendar days after the leak is detected. 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.

**9.6 Cleaning and wash off solvent accounting system.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(d), the owner or operator shall develop an organic solvent accounting form. The organic solvent accounting form shall contain a record of the quantity and type of organic solvent used each month for wash off and cleaning, the number of pieces washed off, and the reason for the wash off. The form shall track the quantity of spent solvent generated from each wash off and cleaning operation each month, and whether it is recycled onsite or disposed offsite.

**9.7 Chemical composition of cleaning and wash off solvents.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(e), the owner or operator shall not use cleaning or wash off solvents that contain any of the pollutants listed in Table 9-1 in concentrations subject to material safety data sheet (MSDS) reporting as required by the Occupational, Safety and Health Administration (OSHA).

***Table 9-1 – Pollutants Excluded From Use in Cleaning and Wash Off Solvents***

<b>Chemical Name</b>	<b>CAS Number</b>
4-Aminobiphenyl	92671
Styrene oxide	96093
Diethyl sulfate	64675
N-Nitrosomorpholine	59892
Dimethyl formamide	68122
Hexamethylphosphoramide	680319
Acetamide	60355
4,4[prime]-Methylenedianiline	101779
o-Anisidine	90040
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
Beryllium salts	-
Benzidine	92875
N-Nitroso-N-methylurea	684935
Bis (chloromethyl) ether	542881
Dimethyl carbamoyl chloride	79447
Chromium compounds (hexavalent)	-
1,2-Propylenimine (2-Methyl aziridine)	75558
Arsenic and inorganic arsenic compounds	99999904
Hydrazine	302012
1,1-Dimethyl hydrazine	57147

Chemical Name	CAS Number
Beryllium compounds	7440417
1,2-Dibromo-3-chloropropane	96128
N-Nitrosodimethylamine	62759
Cadmium compounds	-
Benzo (a) pyrene	50328
Polychlorinated biphenyls (Aroclors)	1336363
Heptachlor	76448
3,3[prime]-Dimethyl benzidine	119937
Nickel subsulfide	12035722
Acrylamide	79061
Hexachlorobenzene	118741
Chlordane	57749
1,3-Propane sultone	1120714
1,3-Butadiene	106990
Nickel refinery dust	-
2-Acetylaminoflourine	53963
3,3[prime]-Dichlorobenzidine	53963
Lindane (hexachlorocyclohexane, gamma)	58899
2,4-Toluene diamine	95807
Dichloroethyl ether (Bis(2-chloroethyl) ether)	111444
1,2-Diphenylhydrazine	122667
Toxaphene (chlorinated camphene)	8001352
2,4-Dinitrotoluene	121142
3,3[prime]-Dimethoxybenzidine	119904
Formaldehyde	50000
4,4[prime]-Methylene bis (2-chloroaniline)	101144
Acrylonitrile	107131
Ethylene dibromide (1,2-Dibromoethane)	106934
DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	72559
Chlorobenzilate	510156
Dichlorvos	62737
Vinyl chloride	75014
Coke Oven Emissions	-
Ethylene oxide	75218
Ethylene thiourea	96457
Vinyl bromide (bromoethene)	593602
Selenium sulfide (mono and di)	7488564
Chloroform	67663
Pentachlorophenol	87865
Ethyl carbamate (Urethane)	51796
Ethylene dichloride (1,2-Dichloroethane)	107062

Chemical Name	CAS Number
Propylene dichloride (1,2-Dichloropropane)	78875
Carbon tetrachloride	56235
Benzene	71432
Methyl hydrazine	60344
Ethyl acrylate	140885
Propylene oxide	75569
Aniline	62533
1,4-Dichlorobenzene(p)	106467
2,4,6-Trichlorophenol	88062
Bis (2-ethylhexyl) phthalate (DEHP)	117817
o-Toluidine	95534
Propoxur	114261
1,4-Dioxane (1,4-Diethyleneoxide)	123911
Acetaldehyde	75070
Bromoform	75252
Captan	133062
Epichlorohydrin	106898
Methylene chloride (Dichloromethane)	75092
Dibenz (ah) anthracene	53703
Chrysene	218019
Dimethyl aminoazobenzene	60117
Benzo (a) anthracene	56553
Benzo (b) fluoranthene	205992
Antimony trioxide	1309644
2-Nitropropane	79469
1,3-Dichloropropene	542756
7, 12-Dimethylbenz(a) anthracene	57976
Benz(c) acridine	225514
Indeno(1,2,3-cd)pyrene	193395
1,2:7,8-Dibenzopyrene	189559

**9.8 Spray booth cleaning.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(f), the owner or operator shall not use compounds containing more than 8.0 percent by weight of volatile organic compound 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 owner or operator shall use no more than 1.0 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating.

**9.9 Storage requirements.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(g), the owner or operator shall use normally closed containers for storing finishing, gluing, cleaning, and wash off materials. A normally closed container is one that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

**9.10 Application equipment requirements.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(h), the owner or operator shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:

1. To apply finishing materials that have a volatile organic compound content no greater than 1.0 pound of volatile organic compound per pound of solids, as applied;
2. For touchup and repair that occurs after completion of the finishing operation or the application of stain and before the application of any other type of finishing material. The materials used for touchup and repair shall be applied from a container that has a volume of no more than 2.0 gallons;
3. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
4. When emissions from the finishing application station are directed to a control device;
5. 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
6. 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 owner or operator shall demonstrate technical or economic infeasibility by submitting a videotape, a technical report, or other documentation that supports the claim of technical or economic infeasibility. The following criteria shall be used independently or in combination to support the claim of technical or economic infeasibility:
  - a. The production speed is too high or the part 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.

**9.11 Line cleaning.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(i), the owner or operator shall pump or drain all organic solvent used for line cleaning into a normally closed container. A normally closed container is one that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

**9.12 Gun cleaning.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(j), the owner or operator shall collect all organic solvent used to clean spray guns into a normally closed container. A normally closed container is one that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

**9.13 Wash off operations.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(k), the owner or operator shall control emissions from wash off operations by using normally closed tanks for wash off and by minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

**9.14 Formulation assessment plan for finishing operations.** In accordance with ARSD 74:36:08:14, as referenced to 40 CFR § 63.803(l), the owner or operator shall maintain with the work practice implementation plan a formulation assessment plan. The formulation assessment plan shall contain the following information:

1. Identifies volatile hazardous air pollutants from the list presented in Table 9-2 that are being used in the finishing operations;
2. Establishes a baseline level of usage for each volatile hazardous air pollutant identified in paragraph (1) of this permit condition. The baseline level of usage shall be the highest annual usage from 1994, 1995, or 1996, for each volatile hazardous air pollutant identified in paragraph (1) of this permit condition. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be estimated of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16;
3. Tracks the annual usage of each volatile hazardous air pollutant identified in paragraph (1) of this permit condition that is present in amounts subject to MSDS reporting as required by OSHA; and
4. If the owner or operator uses a volatile hazardous air pollutant of potential concern listed in Table 9-3 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 for that chemical. The owner or operator shall track the annual usage of each volatile hazardous air pollutant of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as required by OSHA.

**Table 9-2 – Volatile Hazardous Air Pollutants Used in Finishing Operations**

CAS Number	Chemical Name	EPA de minimis
68122	Dimethyl formamide	1.0 tons/year
50000	Formaldehyde	0.2 tons/year
75092	Methylene chloride (Dichloromethane)	4.0 tons/year
79469	2-Nitropropane	1.0 tons/year
78591	Isophorone	0.7 tons/year
1000425	Styrene monomer	1.0 tons/year
108952	Phenol	0.1 tons/year
111422	Dimethanolamine	5.0 tons/year
109864	2-Methoxyethanol	10.0 tons/year
111159	2-Ethoxyethyl acetate	10.0 tons/year

**Table 9-3 – Additional Volatile Hazardous Air Pollutants Used in Finishing Operations**

CAS Number	Chemical Name	EPA de minimis
92671	4-Aminobiphenyl	1.0 tons/year
96093	Styrene oxide	1.0 tons/year
64675	Diethyl sulfate	1.0 tons/year
59892	N-Nitrosomorpholine	1.0 tons/year
68122	Dimethyl formamide	1.0 tons/year
680319	Hexamethylphosphoramide	0.01 tons/year
60355	Acetamide	1.0 tons/year
101779	4,4[prime]-Methylenedianiline	1.0 tons/year
90040	o-Anisidine	1.0 tons/year
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00000006 tons/year
92875	Benzidine	0.00003 tons/year
684935	N-Nitroso-N-methylurea	0.00002 tons/year
542881	Bis (chloromethyl) ether	0.00003 tons/year
79447	Dimethyl carbamoyl chloride	0.002 tons/year
75558	1,2-Propylenimine (2-Methyl aziridine)	0.0003 tons/year
57147	1,1-Dimethyl hydrazine	0.0008 tons/year
96128	1,2-Dibromo-3-chloropropane	0.001 tons/year
62759	N-Nitrosodimethylamine	0.0001 tons/year
50328	Benzo (a) pyrene	0.001 tons/year
1336363	Polychlorinated biphenyls (Aroclors)	0.0009 tons/year
76448	Heptachlor	0.002 tons/year
119937	3,3[prime]-Dimethyl benzidine	0.001 tons/year
79061	Acrylamide	0.002 tons/year
118741	Hexachlorobenzene	0.004 tons/year
57749	Chlordane	0.005 tons/year
1120714	1,3-Propane sultone	0.003 tons/year
106990	1,3-Butadiene	0.007 tons/year
53963	2-Acetylaminoflourine	0.0005 tons/year
91941	3,3[prime]-Dichlorobenzidine	0.02 tons/year
58899	Lindane (hexachlorocyclohexane, gamma)	0.005 tons/year
95807	2,4-Toluene diamine	0.002 tons/year
111444	Dichloroethyl ether (Bis(2-chloroethyl) ether)	0.006 tons/year
122667	1,2-Diphenylhydrazine	0.009 tons/year
8001352	Toxaphene (chlorinated camphene)	0.006 tons/year
121142	2,4-Dinitrotoluene	0.002 tons/year
119904	3,3[prime]-Dimethoxybenzidine	0.01 tons/year
50000	Formaldehyde	0.2 tons/year
101144	4,4[prime]-Methylene bis (2-chloroaniline)	0.02 tons/year
107131	Acrylonitrile	0.03 tons/year
106934	Ethylene dibromide (1,2-Dibromoethane)	0.01 tons/year

CAS Number	Chemical Name	EPA de minimis
72559	DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	0.01 tons/year
510156	Chlorobenzilate	0.04 tons/year
62737	Dichlorvos	0.02 tons/year
75014	Vinyl chloride	0.02 tons/year
75218	Ethylene oxide	0.09 tons/year
96457	Ethylene thiourea	0.06 tons/year
593602	Vinyl bromide (bromoethene)	0.06 tons/year
67663	Chloroform	0.09 tons/year
87865	Pentachlorophenol	0.07 tons/year
51796	Ethyl carbamate (Urethane)	0.08 tons/year
107062	Ethylene dichloride (1,2-Dichloroethane)	0.08 tons/year
78875	Propylene dichloride (1,2-Dichloropropane)	0.1 tons/year
56235	Carbon tetrachloride	0.1 tons/year
71432	Benzene	0.2 tons/year
140885	Ethyl acrylate	0.1 tons/year
75569	Propylene oxide	0.5 tons/year
62533	Aniline	0.1 tons/year
106467	1,4-Dichlorobenzene(p)	0.3 tons/year
88062	2,4,6-Trichlorophenol	0.6 tons/year
117817	Bis (2-ethylhexyl) phthalate (DEHP)	0.5 tons/year
95534	o-Toluidine	0.4 tons/year
114261	Propoxur	2.0 tons/year
79016	Trichloroethylene	1.0 tons/year
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.6 tons/year
75070	Acetaldehyde	0.9 tons/year
75252	Bromoform	2.0 tons/year
133062	Captan	2.0 tons/year
106898	Epichlorohydrin	2.0 tons/year
75092	Methylene chloride (Dichloromethane)	4.0 tons/year
127184	Tetrachloroethylene (Perchloroethylene)	4.0 tons/year
53703	Dibenz (ah) anthracene	0.01 tons/year
218019	Chrysene	0.01 tons/year
60117	Dimethyl aminoazobenzene	1.0 tons/year
56553	Benzo (a) anthracene	0.01 tons/year
205992	Benzo (b) fluoranthene	0.01 tons/year
79469	2-Nitropropane	1.0 tons/year
542756	1,3-Dichloropropene	1.0 tons/year
57976	7, 12-Dimethylbenz(a) anthracene	0.01 tons/year
225514	Benz(c) acridine	0.01 tons/year
193395	Indeno(1,2,3-cd)pyrene	0.01 tons/year
189559	1,2:7,8-Dibenzopyrene	0.01 tons/year

CAS Number	Chemical Name	EPA de minimis
79345	1,1,2,2-Tetrachloroethane	0.03 tons/year
91225	Quinoline	0.0006 tons/year
75354	Vinylidene chloride (1,1-Dichloroethylene)	0.04 tons/year
87683	Hexachlorobutadiene	0.09 tons/year
82688	Pentachloronitrobenzene (Quintobenzene)	0.03 tons/year
78591	Isophorone	0.7 tons/year
79005	1,1,2-Trichloroethane	0.1 tons/year
74873	Methyl chloride (Chloromethane)	1.0 tons/year
67721	Hexachloroethane	0.5 tons/year
1582098	Trifluralin	0.9 tons/year
1319773	Cresols/Cresylic acid (isomers and mixture)	1.0 tons/year
108394	m-Cresol	1.0 tons/year
75343	Ethylidene dichloride (1,1- Dichloroethane)	1.0 tons/year
95487	o-Cresol	1.0 tons/year
106445	p-Cresol	1.0 tons/year
74884	Methyl iodide (Iodomethane)	1.0 tons/year
100425	Styrene	1.0 tons/year
107051	Allyl chloride	1.0 tons/year
334883	Diazomethane	1.0 tons/year
95954	2,4,5_ Trichlorophenol	1.0 tons/year
133904	Chloramben	1.0 tons/year
106887	1,2_Epoxybutane	1.0 tons/year
108054	Vinyl acetate	1.0 tons/year
126998	Chloroprene	1.0 tons/year
123319	Hydroquinone	1.0 tons/year
92933	4-Nitrobiphenyl	1.0 tons/year
56382	Parathion	0.1 tons/year
13463393	Nickel Carbonyl	0.1 tons/year
60344	Methyl hydrazine	0.006 tons/year
151564	Ethylene imine	0.0003 tons/year
77781	Dimethyl sulfate	0.1 tons/year
107302	Chloromethyl methyl ether	0.1 tons/year
57578	beta-Propiolactone	0.1 tons/year
100447	Benzyl chloride	0.04 tons/year
98077	Benzotrichloride	0.0006 tons/year
107028	Acrolein	0.04 tons/year
584849	2,4_ Toluene diisocyanate	0.1 tons/year
75741	Tetramethyl lead	0.01 tons/year
78002	Tetraethyl lead	0.01 tons/year
12108133	Methylcyclopentadienyl manganese	0.1 tons/year
624839	Methyl isocyanate	0.1 tons/year

CAS Number	Chemical Name	EPA de minimis
77474	Hexachlorocyclopentadiene	0.1 tons/year
62207765	Fluomine	0.1 tons/year
10210681	Cobalt carbonyl	0.1 tons/year
79118	Chloroacetic acid	0.1 tons/year
534521	4,6-Dinitro-o-cresol, and salts	0.1 tons/year
101688	Methylene diphenyl diisocyanate	0.1 tons/year
108952	Phenol	0.1 tons/year
62384	Mercury, (acetato-o) phenyl	0.01 tons/year
98862	Acetophenone	1.0 tons/year
108316	Maleic anhydride	1.0 tons/year
532274	2-Chloroacetophenone	0.06 tons/year
51285	2,4-Dinitrophenol	1.0 tons/year
109864	2-Methoxy ethanol	10.0 tons/year
98953	Nitrobenzene	1.0 tons/year
74839	Methyl bromide (Bromomethane)	10.0 tons/year
75150	Carbon disulfide	1.0 tons/year
121697	N,N-Dimethylaniline	1.0 tons/year
106514	Quinone	5.0 tons/year
123386	Propionaldehyde	5.0 tons/year
120809	Catechol	5.0 tons/year
85449	Phthalic anhydride	5.0 tons/year
463581	Carbonyl sulfide	5.0 tons/year
132649	Dibenzofurans	5.0 tons/year
100027	4-Nitrophenol	5.0 tons/year
540841	2,2,4-Trimethylpentane	5.0 tons/year
111422	Diethanolamine	5.0 tons/year
822060	Hexamethylene-1,6-diisocyanate	5.0 tons/year
-	Glycol ethers <sup>1</sup>	5.0 tons/year
-	Polycyclic organic matter <sup>2</sup>	0.01 tons/year

<sup>1</sup> – Except for ethylene glycol butyl ether, ethylene glycol ethyl ether (2-ethoxy ethanol), ethylene glycol hexyl ether, ethylene glycol methyl ether (2-methoxyethanol), ethylene glycol phenyl ether, ethylene glycol propyl ether, ethylene glycol mono-2-ethylhexyl ether, diethylene glycol butyl ether, diethylene glycol ethyl ether, diethylene glycol methyl ether, diethylene glycol hexyl ether, diethylene glycol phenyl ether, diethylene glycol propyl ether, triethylene glycol butyl ether, triethylene glycol ethyl ether, triethylene glycol methyl ether, triethylene glycol propyl ether, ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate; and

<sup>2</sup> – Except for benzo(b)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, 7,12-dimethylbenzo(a)anthracene, benz(c)acridine, chrysene, dibenz(ah)anthracene, 1,2:7,8-dibenzopyrene, indeno(1,2,3-cd)pyrene, but including dioxins and furans.

## **10.0 PSD PERMIT EXEMPTION**

**10.1 Exemption from a PSD permit.** In accordance with ARSD 74:36:05:16.01(8), the owner or operator is exempt from needing a PSD permit for the addition of Unit #10 and #11. The exemption is based on operational limits in this permit. Any relaxation in this permit may require a PSD permit before that change is initiated. This permit condition is no longer applicable once the existing baghouses are removed and all processes are routed to the two new baghouses.