

ADDITIONAL SPECIAL TERMS AND CONDITIONS

INTRODUCTION: Sauder Manufacturing Company is proposing to modify their coating operations at the facility. In order to allow for an increase in coating usage, their existing booths (sealer booth R001, topcoat booth R002 and stain booth #1 R003) require permit modifications. In addition, the company is proposing to install stain booth #2 (R006), stain booth #3 (R007) and stain booth #4 (R008).

A. APPLICABLE EMISSION LIMITATIONS AND/OR CONTROL REQUIREMENTS

1. The coatings employed in emissions units R001, R002, R003, R006, R007 and R008 shall not exceed a volatile hazardous air pollutant (VHAP) content of 1.0 pound VHAP per pound of solids, as applied.
2. The maximum annual OC emissions from coating and clean up material usage for emissions units R001, R002, R003, R006, R007 and R008 shall not exceed 129.6 tons/year, based upon a rolling, 12-month summation of the OC input rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the OC input levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative OC Input Level</u>
1	27.1 tons
1-2	54.3 tons
1-3	81.4 tons
1-4	108.5 tons
1-5	129.6 tons
1-6	129.6 tons
1-7	129.6 tons
1-8	129.6 tons
1-9	129.6 tons
1-10	129.6 tons
1-11	129.6 tons
1-12	129.6 tons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual OC emission limitation shall be based upon a rolling, 12-month summation of the coating and cleanup material OC input rates.

B. OPERATIONAL RESTRICTIONS

1. The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (l) of section 63.803 located in 40 CFR Part 63, Subpart JJ.
2. The permittee shall not employ any coatings, stains, sealers or cleanup materials in emissions units R001, R002, R003, R006, R007 and R008 which are photochemically reactive materials, as defined in OAC rule 3745-21-01.

C. MONITORING AND/OR RECORD KEEPING REQUIREMENTS

1. In order to demonstrate compliance with the allowable coating and cleanup material emission limit of 129.6 tons/year, based upon a rolling, 12-month summation of the OC input rates, the permittee shall collect and record the following information each month for emissions units R001, R002, R003, R006, R007 and R008:

FOR INPUT RATES FROM COATING MATERIAL USAGE IN EACH EMISSIONS UNIT

- a. The company identification for each coating material employed.
- b. The determination of whether or not the coating material is photochemically reactive.
- c. The number of gallons of each coating material employed.
- d. The OC content of each coating material, in pounds/gallon.
- e. The OC input rate for each coating material, in pounds/month [(c)x(d)].
- f. The total OC input rate for all coating materials, in pounds/month [summation of (e)].

FOR INPUT RATES FROM CLEANUP MATERIAL USAGE IN EACH EMISSIONS UNIT

- g. The company identification for each cleanup material* employed.
- h. The determination of whether or not the cleanup material is photochemically reactive.
- i. The number of gallons of each cleanup material employed.
- j. The OC content of each cleanup material, in pounds/gallon.
- k. The OC input rate for each cleanup material, in pounds/month [(i)x(j)].
- l. The total OC input rate for all cleanup material, in pounds/month [summation of (k)].

*Note: The permittee is only required to maintain records for cleanup materials that result in the emissions of OC.

FOR COMBINED INPUT RATES FROM ALL COATINGS AND CLEANUP MATERIALS FROM EMISSIONS UNITS R001, R002, R003, R006, R007 AND R008

- m. The total OC input rate from all coating materials, in pounds/month [summation of (e) for each emissions unit].
- n. The total OC input rate from all cleanup materials, in pounds/month [summation of (l) for each emissions unit].
- o. The total OC input rate for all coatings and cleanup

materials, in pounds/month [(m)+(n)].

- p. Beginning after the first 12 calendar months of operation following the issuance of this permit, the total OC input rate/rolling 12-month period [calculated as follows: input/rolling 12-month period = sum of (o) from preceding 11 calendar months + (o) for the current month]. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative OC input rate for each calendar month.
- 2. In order to demonstrate compliance with the allowable coating material content restriction of 1.0 pound VHAP/pound solids, the permittee shall maintain records of the following information:
 - a. A certified product data sheet for each finishing material (i.e., sealer, topcoat and stain).
 - b. The VHAP content, in pound VHAP/pound solids, as applied, of each finishing material.
- 3. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan.
- 4. The permittee shall maintain records of the compliance certifications submitted in accordance with section D.5 of the terms and conditions of this permit. In addition, the permittee shall maintain records of all other information submitted with the compliance status reports.
- 5. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed, for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form. The permittee shall maintain all records in accordance with the requirements of 40 CFR Part 63, section 63.10(b)(1).

D. REPORTING REQUIREMENTS

- 1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month OC emission limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative OC input rates. These reports are due by the date described in section D.2 of the terms and conditions of this permit.
- 2. Unless otherwise specified, the permittee shall submit reports in the following manner:
 - a. Reports of any required information shall be submitted to the appropriate Ohio EPA district office or local air agency.
 - b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly

written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, a quarterly report shall be submitted which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

3. The actual annual OC emissions data for emissions units R001, R002, R003, R006, R007, R008 and P002 shall be reported pursuant to the fee emissions report required by OAC rule 3745-78-02(A).
4. Initial compliance status report: The permittee shall submit an initial compliance status report, as required by 40 CFR Part 63, Subpart A (General Provisions), section 63.9(h), which includes the following information:
 - a. A statement that compliant sealers, topcoats and stains are being used in emissions units R001, R002, R003, R006, R007 and R008.
 - b. A statement that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.

The report shall be submitted no later than 60 days after the compliance date of December 7, 1998 for units R001, R002 and R003 and within 60 days after the compliance date (start-up) for units R006, R007 and R008.

5. Semi-annual compliance certification reports: The permittee shall submit compliance certifications, as required by 40 CFR Part 63, Subpart 63.807(c) which include the following information:
 - a. A statement that compliant sealers, topcoats and stains have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. If the source was in noncompliance, the permittee should state the measures that were taken to bring the source into compliance.
 - b. 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.

The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date (December 7, 1998 for units R001, R002 and R003 and start-up for units R006, R007 and R008). Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report. The reports shall

cover the previous 6-month operating period.

E. TESTING REQUIREMENTS

1. In accordance with 40 CFR Part 63, section 63.805(a), the EPA Method 311 of 40 CFR Part 63, Appendix A shall be used in conjunction with coating formulation data to determine the VHAP content of the liquid coating, except as otherwise indicated. The EPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the solids content, by weight, and the density of coatings. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis By Reference Method 24 and Reference Method 24A," EPA-340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1).

2. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation: R001 - 23.2 pounds OC/hour from coating material usage, 101.6 tons/year

Applicable Compliance Method: The hourly and annual OC emission limitations are based on the emissions unit's potential to emit. Therefore, no hourly or monthly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limitations.

b. Emission Limitation: R001 - 104.6 pounds OC/month from clean up material usage, 0.63 ton OC/year

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.1 of the terms and conditions of this permit.

c. Emission Limitation: R001 - 0.62 pound PE/hour, 2.72 tons/year

Applicable Compliance Method: The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$E = (\text{maximum coating solids usage rate}) \times (1-TE) \times (1-CE)$$

where:

E = Particulate emissions rate (pounds/hour).

TE = Transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = Control efficiency of the control equipment (filters).

If required, compliance with the PE limitation shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B) (10).

d. Emission Limitation: R002 - 20.1 pounds OC/hour from coating material usage, 88.0 tons/year

Applicable Compliance Method: The hourly and annual OC emission limitations are based on the emissions unit's

potential to emit. Therefore, no hourly or monthly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limitations.

- e. Emission Limitation: R002 - 107.6 pounds OC/month from clean up material usage, 0.65 ton OC/year

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.1 of the terms and conditions of this permit.

- f. Emission Limitation: R002 - 0.91 pound PE/hour, 4.0 tons/year

Applicable Compliance Method: The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$E = (\text{maximum coating solids usage rate}) \times (1-TE) \times (1-CE)$$

where:

E = Particulate emissions rate (pounds/hour).

TE = Transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = Control efficiency of the control equipment (filters).

If required, compliance with the PE limitation shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B)(10).

- g. Emission Limitation: R003 - 7.41 pounds OC/hour from coating material usage, 32.5 tons/year

Applicable Compliance Method: The hourly and annual OC emission limitations are based on the emissions unit's potential to emit. Therefore, no hourly or monthly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limitations.

- h. Emission Limitation: R003 - 15.7 pounds OC/month from clean up material usage, 0.094 ton OC/year

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.1 of the terms and conditions of this permit.

- i. Emission Limitation: R003 - 0.086 pound PE/hour, 0.38 ton/year

Applicable Compliance Method: The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$E = (\text{maximum coating solids usage rate}) \times (1-TE) \times (1-CE)$$

where:

E = Particulate emissions rate (pounds/hour).

TE = Transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = Control efficiency of the control equipment (filters).

If required, compliance with the PE limitation shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B) (10).

- j. Emission Limitation: R006 - 7.41 pounds OC/hour from coating material usage, 32.5 tons/year

Applicable Compliance Method: The hourly and annual OC emission limitations are based on the emissions unit's potential to emit. Therefore, no hourly or monthly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limitations.

- k. Emission Limitation: R006 - 15.7 pounds OC/month from clean up material usage, 0.094 ton OC/year

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.1 of the terms and conditions of this permit.

- l. Emission Limitation: R006 - 0.086 pound PE/hour, 0.38 ton/year

Applicable Compliance Method: The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$E = (\text{maximum coating solids usage rate}) \times (1-TE) \times (1-CE)$$

where:

E = Particulate emissions rate (pounds/hour).

TE = Transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = Control efficiency of the control equipment (filters).

If required, compliance with the PE limitation shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B) (10).

- m. Emission Limitation: R007 - 7.41 pounds OC/hour from coating material usage, 32.5 tons/year

Applicable Compliance Method: The hourly and annual OC emission limitations are based on the emissions unit's potential to emit. Therefore, no hourly or monthly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limitations.

- n. Emission Limitation: R007 - 15.7 pounds OC/month from clean up material usage, 0.094 ton OC/year

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.1 of the

terms and conditions of this permit.

- o. Emission Limitation: R007 - 0.086 pound PE/hour, 0.38 ton/year

Applicable Compliance Method: The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$E = (\text{maximum coating solids usage rate}) \times (1-TE) \times (1-CE)$$

where:

E = Particulate emissions rate (pounds/hour).

TE = Transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = Control efficiency of the control equipment (filters).

If required, compliance with the PE limitation shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B) (10).

- p. Emission Limitation: R008 - 7.41 pounds OC/hour from coating material usage, 32.5 tons/year

Applicable Compliance Method: The hourly and annual OC emission limitations are based on the emissions unit's potential to emit. Therefore, no hourly or monthly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limitations.

- q. Emission Limitation: R008 - 15.7 pounds OC/month from clean up material usage, 0.094 ton OC/year

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.1 of the terms and conditions of this permit.

- r. Emission Limitation: R008 - 0.086 pound PE/hour, 0.38 ton/year

Applicable Compliance Method: The permittee may calculate actual PE emission rates for the unit utilizing the following equation:

$$E = (\text{maximum coating solids usage rate}) \times (1-TE) \times (1-CE)$$

where:

E = Particulate emissions rate (pounds/hour).

TE = Transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = Control efficiency of the control equipment (filters).

If required, compliance with the PE limitation shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B) (10).

- s. Emission Limitation: OC emission limitation/input rate limitation of 129.6 tons OC/rolling 12-month period from emissions units R001, R002, R003, R006, R007 and R008

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.1 of the terms and conditions of this permit.

- t. Emission Limitation: VHAP content of all coatings employed in emissions units R001, R002, R003, R006, R007 and R008 shall not exceed 1.0 pound VHAP/pound solids, as applied

Applicable Compliance Method: Compliance shall be based upon the record keeping specified in section C.2 of the terms and conditions of this permit. The company complies with this emissions limitation by using compliant finishing materials (i.e., sealers, topcoats and stains), demonstrated by maintaining certified product data sheets for each coating. The permittee shall demonstrate continuous compliance by using compliant coatings and maintaining records that demonstrate the coatings are compliant and submitting a compliance certification with the semiannual report required by 40 CFR Part 63, Subpart JJ, section 63.807(c).

- u. Emission Limitation: R001, R002, R003, R006, R007 and R008 - visible PE shall not exceed 20 percent opacity, as a 6-minute average, except as otherwise provided by rule

Applicable Compliance Method: OAC rule 3745-17-03(B)(1).

F. MISCELLANEOUS REQUIREMENTS

None