



12/12/2014

Robert Miller
RIPPLING STREAM FINISHING, INC.
3904 G.P. EASTERLY RD
WEST FARMINGTON, OH 44491

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0278000795
Permit Number: P0118073
Permit Type: Renewal
County: Trumbull

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- How to appeal this permit
• How to save money, reduce pollution and reduce energy consumption
• How to give us feedback on your permitting experience
• How to get an electronic copy of your permit

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

Certified Mail

Table with 2 columns: No, TOXIC REVIEW; No, SYNTHETIC MINOR TO AVOID MAJOR NSR; No, CEMS; No, MACT/GACT; No, NSPS; No, NESHAPS; No, NETTING; No, MODELING SUBMITTED; No, SYNTHETIC MINOR TO AVOID TITLE V; No, FEDERALLY ENFORCABLE PTIO (FEPTIO); No, SYNTHETIC MINOR TO AVOID MAJOR GHG

## **How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
RIPPLING STREAM FINISHING, INC.**

Facility ID:	0278000795
Permit Number:	P0118073
Permit Type:	Renewal
Issued:	12/12/2014
Effective:	12/12/2014
Expiration:	12/12/2024





**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
RIPPLING STREAM FINISHING, INC.**

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit? .....	4
3. What records must I keep under this permit? .....	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application? .....	4
6. What happens to this permit if my project is delayed or I do not install or modify my source? .....	5
7. What reports must I submit under this permit? .....	5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? .....	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? .....	6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? .....	6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? .....	6
13. Can I transfer this permit to a new owner or operator?.....	7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? .....	7
15. What happens if a portion of this permit is determined to be invalid? .....	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions .....	10
1. B001, Diesel engine #1 .....	11
2. R001, Stain booth .....	18





**Final Permit-to-Install and Operate**  
RIPPLING STREAM FINISHING, INC.  
**Permit Number:** P0118073  
**Facility ID:** 0278000795  
**Effective Date:** 12/12/2014

## Authorization

Facility ID: 0278000795  
Application Number(s): A0052268  
Permit Number: P0118073  
Permit Description: PTIO renewal permit for a wood products facility including emissions units B001 (435 HP Cummins stationary diesel engine) and R001 (Industrial spray booth with HVLP air gun).  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 12/12/2014  
Effective Date: 12/12/2014  
Expiration Date: 12/12/2024  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

RIPPLING STREAM FINISHING, INC.  
3904 GEAUGA PORTAGE EASTERLY RD.  
West Farmington, OH 44491

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

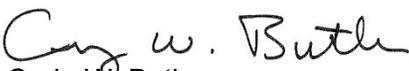
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office  
2110 East Aurora Road  
Twinsburg, OH 44087  
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



**Final Permit-to-Install and Operate**  
RIPPLING STREAM FINISHING, INC.  
**Permit Number:** P0118073  
**Facility ID:** 0278000795  
**Effective Date:** 12/12/2014

## Authorization (continued)

Permit Number: P0118073

Permit Description: PTIO renewal permit for a wood products facility including emissions units B001 (435 HP Cummins stationary diesel engine) and R001 (Industrial spray booth with HVLP air gun).

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>B001</b>
Company Equipment ID:	Diesel engine #1
Superseded Permit Number:	P0103644
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>R001</b>
Company Equipment ID:	Stain booth
Superseded Permit Number:	P0103667
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
RIPPLING STREAM FINISHING, INC.  
**Permit Number:** P0118073  
**Facility ID:** 0278000795  
**Effective Date:** 12/12/2014

## **A. Standard Terms and Conditions**



**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.



**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



**Final Permit-to-Install and Operate**  
RIPPLING STREAM FINISHING, INC.  
**Permit Number:** P0118073  
**Facility ID:** 0278000795  
**Effective Date:** 12/12/2014

## **B. Facility-Wide Terms and Conditions**



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.



**Final Permit-to-Install and Operate**  
RIPPLING STREAM FINISHING, INC.  
**Permit Number:** P0118073  
**Facility ID:** 0278000795  
**Effective Date:** 12/12/2014

## **C. Emissions Unit Terms and Conditions**



**1. B001, Diesel engine #1**

**Operations, Property and/or Equipment Description:**

435 HP Cummins stationary diesel engine

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.48 lb/hr and 1.05 tons/yr.  Sulfur dioxide (SO <sub>2</sub> ) shall not exceed 0.61 lb/hr and 1.34 tons/yr. See b)(2)a and c)(1) below.  Nitrogen dioxides (NO <sub>x</sub> ) shall not exceed 11.31lbs/hr and 24.88 tons/yr.  Organic compounds (OC) shall not exceed 0.26 lb/hr and 0.57 ton/yr.  Carbon monoxide (CO) shall not exceed 0.74 lb/hr and 1.63 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(5)(a).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions shall not exceed 0.310 lb/mmBtu.
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-18-06(G)	The emission limitation required by this applicable rule is less stringent than or equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-31-05(E)	NOx emissions shall not exceed 24.88 tons/yr. See c)(2) below.

(2) Additional Terms and Conditions

a. In accordance with OAC rule 3745-31-05(A)(3), best available technology for this emissions unit includes the emission limitations and fuel sulfur content restriction.

c) Operational Restrictions

- (1) The permittee shall use only diesel fuel/number 2 fuel oil with a maximum sulfur content of 0.5 percent, by weight, for combustion in this emissions unit.
- (2) The maximum operating hours for this emissions unit shall not exceed 114.8 hours per week and 4400 hours per year.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall maintain documentation of the sulfur content of all fuels received.
- (3) The permittee shall maintain weekly records of the operating hours for this emissions unit.



- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the weekly check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day during which a fuel other than diesel fuel with a maximum sulfur content of 0.5 percent by weight was burned in this emissions unit and any corrective action(s) that were taken. Each report shall be submitted to the Ohio EPA Northeast District Office within 30 days of the deviation.
- (2) The permittee shall submit annual reports by January 31 of each year that include the total annual operating hours for the previous calendar year, as a summation of the weekly records kept according to d)(3) above.
- (3) The permittee shall submit semiannual written reports that:
  - a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. describe any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month periods.



- (4) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
  - (5) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Northeast District Office of the Ohio EPA.
  - (6) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:  
PE emissions shall not exceed 0.48 lb/hr.  
  
Applicable Compliance Method:  
Compliance with the hourly emission limitation above shall be determined by multiplying 0.0011 lb/hp-hr, the emission factor supplied by the manufacturer, by 435 hp, the power output rating of this unit.  
  
If required, compliance shall be demonstrated based upon an emission test performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.
    - b. Emission Limitation:  
PE emissions shall not exceed 1.05 tons/yr.  
  
Applicable Compliance Method:  
The annual emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.48 lb/hr) by the maximum permitted allowable hours of operation (4400 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.
    - c. Emission Limitation:  
SO<sub>2</sub> emissions shall not exceed 0.61 lb/hr.  
  
Applicable Compliance Method:  
Compliance with the hourly emission limitation above shall be determined by multiplying 0.0014 lb/hp-hr, the emission factor supplied by the manufacturer, by 435 hp, the power output rating of this unit.



- d. Emission Limitation:  
SO<sub>2</sub> emissions shall not exceed 1.34 tons/yr.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the short-term allowable SO<sub>2</sub> emission limitation (0.61 lb/hr) by the maximum permitted allowable hours of operation (4400 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

- e. Emission Limitation:  
NO<sub>x</sub> emissions shall not exceed 11.31 lbs/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation above shall be determined by multiplying 0.026 lb/hp-hr, the emission factor supplied by the manufacturer, by 435 hp, the power output rating of this unit.

- f. Emission Limitation:  
NO<sub>x</sub> emissions shall not exceed 24.88 tons/yr.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the short-term allowable NO<sub>x</sub> emission limitation (11.31 lbs/hr) by the maximum permitted allowable hours of operation (4400 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

- g. Emission Limitation:  
OC emissions shall not exceed 0.26 lb/hr.

Applicable Compliance Method:

Compliance with the hourly emission limitation above shall be determined by multiplying 0.0006 lb/hp-hr, the emission factor supplied by the manufacturer, by 435 hp, the power output rating of this unit.

- h. Emission Limitation:  
OC emissions shall not exceed 0.57 tons/yr.

Applicable Compliance Method:

The annual emission limitation was developed by multiplying the short-term allowable OC emission limitation (0.26 lb/hr) by the maximum permitted allowable hours of operation (4400 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.



i. Emission Limitation:  
 CO emissions shall not exceed 0.74 lb/hr.

Applicable Compliance Method:  
 Compliance with the hourly emission limitation above shall be determined by multiplying 0.0017 lb/hp-hr, the emission factor supplied by the manufacturer, by 435 hp, the power output rating of this unit.

j. Emission Limitation:  
 CO emissions shall not exceed 1.63 tons/yr.

Applicable Compliance Method:  
 The annual emission limitation was developed by multiplying the short-term allowable CO emission limitation (0.74 lb/hr) by the maximum permitted allowable hours of operation (4400 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

k. Emission Limitation:  
 Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:  
 If required, compliance with the visible particulate emission limitation shall be demonstrated based upon the visible emission observations performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

l. Emission Limitation:  
 PE emissions shall not exceed 0.310 lb/mmBtu.

Applicable Compliance Method:  
 Compliance with the short term emission limitation above may be determined by the following equation:

$$\frac{0.0011 \text{ lb}}{1 \text{ hp} - \text{hr}} \times \frac{1 \text{ hp} - \text{hr}}{7000 \text{ Btu}} \times \frac{1000000 \text{ Btu}}{1 \text{ mmBtu}} = \text{lb/mmBtu}$$

Where:

0.0011 lb/hp-hr is the emission factor supplied by the manufacturer.

If required, compliance shall be demonstrated based upon an emission test performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.



**Final Permit-to-Install and Operate**  
RIPPLING STREAM FINISHING, INC.  
**Permit Number:** P0118073  
**Facility ID:** 0278000795  
**Effective Date:** 12/12/2014

- g) Miscellaneous Requirements
  - (1) Emissions unit B001 was installed on 9/15/2005.



**2. R001, Stain booth**

**Operations, Property and/or Equipment Description:**

Industrial spray booth with HVLP air gun.

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(3), d)(4), d)(5), d)(6), and e)(4).
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 11.16 lbs/hr and 21.3 tons/yr, as a rolling, 12-month summation.  VOC content of coatings shall not exceed 6.0 lbs/gal.  See b)(2)a., b)(2)b., and b)(2)c.below.
b.	OAC rule 3745-31-05(F)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(C)	See c)(1), and c)(2) below.



- (2) Additional Terms and Conditions
  - a. The volatile organic compounds (VOC) emissions from coatings shall not exceed 11.16 pounds per hour. This emission limitation is based upon the maximum coating application rate of 2.0 gallons per hour.
  - b. The VOC content of coatings shall not exceed 6.0 pounds per gallon, as applied.
  - c. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the emissions, upon issuance of this permit. The emissions of VOC from this emissions unit shall not exceed 21.3 tons per year, based upon a rolling, 12-month summation of the emissions.
  - d. The permittee shall operate the dry particulate filter whenever this emissions unit is in operation.
- c) Operational Restrictions
  - (1) The permittee shall operate and maintain the dry particulate filter system for the surface coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter shall be employed during all periods of coating application to control particulate emissions.
  - (2) The permittee shall expeditiously repair the dry particulate filter or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device is not operating in accordance with these requirements.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall collect and record the following information for each day that coatings or cleanup materials are employed in this emissions unit:
    - a. the company identification for each coating or cleanup material employed;
    - b. the VOC content of each coating, in lbs/gallon, as applied;
    - c. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
    - d. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (b) times (c);
    - e. the total number of hours the emissions unit was in operation; and
    - f. the average hourly VOC emission rate for all coatings, i.e., (d)/(e), in lbs/hr.



- (2) The permittee shall collect and record the following information for each month for the emissions unit:
- a. the actual VOC emissions from all coatings and cleanup materials for the previous, 12-month period; and
  - b. the actual VOC emissions from this emissions unit, for the previous, 12-month period.
- (3) The permit to install for the emissions units in this permit was evaluated based on the actual materials and the design parameters of the emissions unit's(s) exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
  - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
  - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day (14.75hr/d) and "Y" days per week (5 d/wk), from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$



- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Worst Case Toxic Contaminant: Xylene

TLV (mg/m<sup>3</sup>): 434.2

Maximum Hourly Emission Rate (lbs/hr): 3.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 128.6

Adjusted MAGLC (ug/m<sup>3</sup>): 10337.9

The permittee has demonstrated that emissions of all air contaminants from the emissions units in this permit are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate



modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
  - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- (7) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Ohio EPA Northeast District Office upon request.
- (8) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.



- (9) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (10) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Ohio EPA Northeast District Office upon request.

- (11) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry particulate filter was not in service when the emissions unit was in operation. The deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
- (2) The permittee submit quarterly deviation (excursion) reports that identify:
  - a. each day during which the average VOC emissions from the coatings exceeded the pounds per hour allowable above, and the actual average VOC emissions for each such day;
  - b. each day during which the VOC content of any coating exceeded the pound per gallon limit from above, and the actual VOC content of each such coating employed; and
  - c. any exceedence of the annual VOC\* emission limitation of 21.3 tons per year, as a rolling, 12-month summation, from R001, and the actual VOC emissions during each such period.

\*based upon the premise that 100% of the solvent in the coating and clean up material employed is emitted.



The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

- (3) The permittee shall submit annual reports that summarize the emissions of VOC from this emissions unit.

The reports shall include the emissions calculations, shall be submitted by January 31 of each year, and shall cover the previous calendar year.

- (4) The permittee shall submit annual reports to the Ohio EPA Northeast District Office, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect.

This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

- (5) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
VOC emissions shall not exceed 11.16 pounds per hour

Applicable Compliance Method:  
Compliance shall be demonstrated by the daily values calculated in section d)(1)f. based upon the record keeping requirements specified in section d)(1).

- b. Emission Limitation:  
VOC emissions shall not exceed 21.3 tons per rolling, 12-month period from all coatings and cleanup material from this emissions unit.

Applicable Compliance Method:  
Compliance shall be demonstrated by the values recorded in sections d)(2)a. and d)(2)b. based upon the record keeping requirements specified in sections d)(1) and d)(2).

- c. Emission Limitation:  
6.0 pounds of VOC per gallon coating, as applied



Applicable Compliance Method:

Any determination of VOC content, solids contents, or density of coating material or cleanup material shall be based on the coating materials as employed (as applied), including the addition of any thinner or viscosity reducer to the coatings.

In accordance with OAC rule 3745-21-04(B)(5), the permittee shall determine the composition of the coatings or cleanup material by formulation data supplied by the manufacturer of the coating materials, or from data determined by an analysis of each coating, as applied, by Reference Method 24 or Method 24A. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), an owner or operator determines that Method 24 or Method 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 and/or Method 24A.

- g) Miscellaneous Requirements
  - (1) Emissions unit R001 was installed 6/1/2005.