

Facility ID: 1409070344 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1409070344 Emissions Unit ID: P901 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

Part II - Special Terms and Conditions

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) None.
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.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
HCl pickle line with scale breaker baghouse and scrubber	OAC rule 3745-31-05(A)(3) (modification of PTI 14-4441)	Scrubber stack: 0.3 lb of particulate emission (PE)/hr, 0.6 TPY of PE 0.3 lb of PE-10/hr, 0.6 TPY of PE-10 2 lbs of HCl/hr, 8.8 TPY of HCl
		Scale breaker baghouse: 2.0 lbs of PE/hr, 8.8 TPY of PE 2.0 lbs of PE-10/hr, 8.8 TPY of PE-10
		15 lbs of VOC/hr*, 30.7 TPY of VOC
		*The hourly emission limitation is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limit.
		See section A.2.b, and B.1 through B.4.
		Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any fugitive emissions point shall not exceed 20% opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-07(B)(1)	The control requirement established by this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	The emissions limitation established by this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)	The VOC content of the metal protective oil(s) employed in this emissions unit shall not exceed 2.6 pounds of VOC per gallon, excluding water and exempt solvents.
	OAC rule 3745-21-09(E)	

2. **Additional Terms and Conditions**
 - (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with VOC content limits and oil usage limits, use of a scrubber for control of pickle line HCl emissions, use of a fabric filter for control of scale breaker PE emissions, and compliance with the Air Toxics Policy. The VOC content, as applied, of the metal evaporative oil(s) employed in this emissions unit shall not exceed 1.4 pounds of VOC per gallon, including water and exempt solvents.

B. Operational Restrictions

1. The maximum annual metal protective oil(s) usage shall not exceed 43,800 gallons per year, including water and

exempt solvents.

2. The maximum annual production rate of steel in this emissions unit shall not exceed 1,100,000 tons per year.
3. The static pressure drop across the scrubber shall be continuously maintained at a value not less than the static pressure drop established during the most recent emissions test that demonstrated that the emissions unit was in compliance (but not less than 1 inch of water column), at all times while the emissions unit is in operation.
4. The scrubber water flow rate shall be continuously maintained at a value not less than the scrubber water flow rate during the most recent emissions test that demonstrated compliance (i.e., not less than 192 gallons per minutes), at all times while the emissions unit is in operation.
5. The pressure drop across the scale breaker baghouse shall be maintained within the range established during the most recent emission test that demonstrated that the emissions unit was in compliance, while the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the name and identification number of each metal protective oil;
 - b. the VOC content of each metal protective oil (excluding water and exempt solvents), as applied;
 - c. the VOC content of each metal protective oil (including water and exempt solvents), as applied;
 - d. the number of gallons employed (including water and exempt solvents), as applied;
 - e. the monthly VOC emissions from the use of metal protective oil(s) [summation of c x d for each metal protective oil]; and
 - f. the monthly production, in tons per month.
2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber (in inches of water column) and the scrubber water flow rate (in gallons per minute) for the scrubber employed for this emissions unit, while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).
3. The permittee shall collect and record the following information for each change where air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.
4. The permittee shall collect and record the following information each day:
 - a. the pressure drop across the scrubber, in inches of water, once per shift.
 - b. the scrubber water flow rate, in gallons per minute, once per shift.
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit, while the emissions unit was in operation.
5. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the scale breaker baghouse (in inches of water column) while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.
6. The permittee shall collect and record the following information each calendar year for this emissions unit:
 - a. the total annual VOC emissions, in tons;
 - b. the total annual production of steel, in tons; and
 - c. the total annual usage of metal protective oils.

D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying (i.e., VOC content exceeding any limitation) metal protective oil(s). The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit annual reports that include the following information for this emissions unit:
 - a. the annual production rate, in tons;
 - b. the annual metal protective oil usage rate, in gallons;
 - c. the annual VOC emissions, in tons;
 - d. the annual PE/PE-10 emissions, in tons; and

- e. the annual HCL emissions, in tons.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

3. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
- the static pressure drop across the scrubber.
 - the scrubber water flow rate.
- If no deviations occurred during the reporting period, a report is required stating so.
4. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the scale breaker baghouse did not comply with the allowable range specified above.

E. Testing Requirements

- Compliance with the visible particulate emissions limitation in OAC rule 3745-17-07(A)(1) shall be determined by the method specified in OAC rule 3745-17-03(B)(1).
- USEPA Methods 24 and 24A shall be used to determine the VOC content for (a) coatings and (b) flexographic and rotogravure printing lines and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR, Part 60, Appendix A, an owner or operator determines that Method 24 or 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 or 24A.
- Compliance with the usage and production limitations in Sections B.1 and B.2 and the VOC emission limitations in Section A.1 shall be determined by the record keeping requirements in Sections C.1. and C.6.
- Compliance with the operational limitations in Sections B.3 and B.4 shall be determined by the record keeping requirements in Sections C.2. and C.5.
- If required, compliance with the hourly PE limitation shall be determined by stack testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A.
- Compliance with the annual PE limitation is ensured if compliance is maintained with the annual production limitation.
- Compliance with the visible particulate emissions limitation in OAC rule 3745-17-07(B)(1) shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

8. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- The emission testing shall be conducted within 6 months prior to permit expiration.
- The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for HCl.
- The following test method shall be employed to demonstrate compliance with the allowable mass emission rate: for HCl, Method 26 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.
- The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

- If required, compliance with the hourly PE-10 limitation shall be determined by stack testing in accordance with Method 201 of 40 CFR, Part 51, Appendix M.
- Compliance with the annual PE-10 limitation is ensured if compliance is maintained with the annual production limitation.
- If required, compliance with the hourly HCl emission limitation shall be determined by stack testing in accordance with Method 26 of 40 CFR, Part 60, Appendix A.
- Compliance with the annual HCl limitation is ensured if compliance is maintained with the annual production

limitation.

F. **Miscellaneous Requirements**

1. Air Toxic Policy Clarifying Language

This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of OAC rule 3745-31-05(A)(3) and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: hydrochloric acid
TLV (ug/m3): 7500
Maximum Hourly Emission Rate (lbs/hr): 2
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16.64
MAGLC (ug/m3): 179

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
- b. Changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. Changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. The change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. The permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. Prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.