



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
MEDINA COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 16-02319

DATE: 11/28/2003

Viking-Worthington Steel Enterprise
Joseph Traylinek
804 Steel Dr
Valley City, OH 44280

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

ARAQMD



**Permit To Install
Terms and Conditions**

**Issue Date: 11/28/2003
Effective Date: 11/28/2003**

FINAL PERMIT TO INSTALL 16-02319

Application Number: 16-02319
APS Premise Number: 1652000030
Permit Fee: **\$3250**
Name of Facility: Viking-Worthington Steel Enterprise
Person to Contact: Joseph Traylinek
Address: 804 Steel Dr
Valley City, OH 44280

Location of proposed air contaminant source(s) [emissions unit(s)]:
**804 Steel Dr
Valley City, Ohio**

Description of proposed emissions unit(s):
**Revised Synthetic Minor Strategy for Facility for HCL and VOC, Replaces PTIs 16-059 and 16-1483
Issued 6/1/77 and 9/27/95 Respectively.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

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 for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	93.0
HCl	9.75

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P001 - HCl pickle line with electrostatic oiling system (the terms and conditions in this permit supercede the terms and conditions in PTI 16-059 issued 6/1/1977).	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-07(G)(2)
	OAC rule 3745-35-07(B)	

Applicable Emissions
Limitations/Control Measures

22.75 pounds of volatile organic compounds (VOC) per hour

The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07 and OAC rule 3745-21-07(G)(2).

0.5 pound of hydrochloric acid (HCl) per hour from the scrubber stack

2.19 tons of HCl per year from the scrubber stack

Fugitive emissions of HCl from emissions units P001 and P002 shall not exceed 0.1 ton per year.

The emissions of VOC from emissions units P001 and P002 shall not exceed 93.0 tons of VOC per year, as a rolling 12-month summation of the monthly emissions.

The VOC content of the rust preventive oil shall not exceed 5.0 pounds of VOC per gallon of rust preventive oil.

See B.1 below.

See B.5 below.

2. Additional Terms and Conditions

- 2.a The hourly VOC emission limitation regulated per OAC rule 3745-31-05(A)(3) is based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with this limit.

B. Operational Restrictions

1. The maximum annual rust preventive oil usage for emissions units P001 and P002 shall not exceed 37,200, based upon a rolling, 12-month summation of the rust preventive oil usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Rust Preventive Oil Usage</u>
1	3,100 gallons
1-2	6,200 gallons
1-3	9,300 gallons
1-4	12,400 gallons
1-5	15,500 gallons
1-6	18,600 gallons
1-7	21,700 gallons
1-8	24,800 gallons
1-9	27,900 gallons
1-10	31,000 gallons
1-11	34,100 gallons
1-12	37,200 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual rust preventive oil usage limitation shall be based upon a rolling, 12-month summation of the rust preventive oil usage figures.

2. The pH of the scrubber liquor shall be maintained within the range of 0.4 to 7.5.
3. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water or not less than the minimum static pressure drop established during the most

recent emission test that demonstrated that the emissions unit was in compliance at all times while the emissions unit is in operation.

4. The scrubber water flow rate shall be continuously maintained at a value of not less than 125 gallons per minute or not less than the minimum water flow rate value established during the most recent emission test that demonstrated that the emissions unit was in compliance at all times while the emissions unit is in operation.
5. The permittee shall not employ any photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5), in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information monthly for emissions units P001 and P002:
 - a. the name and identification number of each rust preventive oil employed;
 - b. the VOC content of each rust preventive oil employed, in pounds per gallon;
 - c. the amount of each rust preventive oil employed, in gallons;
 - d. the total amount of all rust preventive oils employed, in gallons;
 - e. the total VOC emissions from all rust preventive oils employed, in tons (i.e., the sum of (b) times (c) for each rust preventive oil employed, then divided by 2000); and
 - f. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the rust preventive oil usage figures and the VOC emissions for each month.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative rust preventive oil usage for each calendar month.

2. The permittee shall properly operate and maintain equipment to monitor the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pH of the scrubber liquor, on a once per shift basis; and
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate 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 manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;
 - b. the scrubber water flow rate, in gallons per minute, on a once per shift basis; and
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
4. The permittee shall maintain the following information for this emissions unit:
- a. the MSDS sheets for each liquid organic material employed; and
 - b. documentation as to whether or not each material is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5).
5. The permit to install for this emissions unit (P001) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: hydrochloric acid

TLV (mg/m3): 5.49

Maximum Hourly Emission Rate (lbs/hr): 0.89*

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 94.7

MAGLC (ug/m3): 130.7

*Increase in hydrochloric acid emission rates for P001, P002, and P003.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month rust preventive oil usage limitation and the rolling, 12-month VOC limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative rust preventive oil usage levels.
2. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.
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:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" (as defined in OAC rule 3745-21-01(C)(5)) is employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such an occurrence.
5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a rust preventive oil which exceeds the VOC content specified in section A.1 of these terms and conditions is employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after such an occurrence.
6. The permittee shall also submit annual reports which specify the total VOC emissions from emissions units P001 and P002 combined and the total HCl emissions from emissions units P001,

P002, and P003 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

7. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions of this permit.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted six months prior to the permit to operate renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for HCl.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for HCl, Methods 1-4 and 26A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. 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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
4. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

5.0 pounds of VOC per gallon of rust preventive oil

Applicable Compliance Method:

Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the rust preventive oil.

b. Emission Limitation:

22.75 pounds of VOC per hour

Applicable Compliance Method:

Multiply the allowable VOC content of the rust preventive oil 5.0 pounds of VOC per gallon of rust preventive oil by the maximum hourly rust preventive oil usage.

c. Emission Limitation:

The emissions of VOC from emissions units P001 and P002 shall not exceed 93.0 tons of VOC per year, as a rolling 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monthly record keeping as required by section C.1 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the rust preventive oils.

d. Emission Limitation:

0.5 pound of HCl per hour from the scrubber stack

Applicable Compliance Method:

Compliance with the allowable mass emission rate for HCl shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 26A as required by section E.1 of these terms and conditions.

e. Emission Limitation:

2.19 tons of HCl per year from the scrubber stack

Applicable Compliance Method:

Multiply the allowable hourly emission limitation by 8760 hours per year, then divide by 2000 pounds per ton.

f. Emission Limitations:

Fugitive emissions of HCl from emissions units P001 and P002 shall not exceed 0.1 ton per year.

Applicable Compliance Method:

Compliance with the fugitive emissions of HCl shall be determined by employing Method 7903 IC from the National Institute of Occupational Safety and Health's Manual of Analytical Methods to determine the concentration of HCl in the area the steel pickling line and through the calculation method provided by Viking Worthing Steel Enterprise in the Permit to Install 16-02319 application.

Viking-Worthington Steel Enterprise
PTI Application: 16-02319
Issued

Facility ID: 1652000030

Emissions Unit ID: P001

F. Miscellaneous Requirements

1. The terms and conditions in this permit to install 16-02319 shall supercede all the air pollution control requirements for P001 in permit to install 16-059.

2. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, B.1, B.2, B.3, B.4, B.5, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, D.5, D.6, E.1, E.2, E.3, and E.4.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P002 - HCl pickle line with electrostatic oiling system (the terms and conditions in this permit supercede the terms and conditions in PTI 16-1483 issued 9/27/1995).	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-07(G)(2)
	OAC rule 3745-35-07(B)	

Applicable Emissions
Limitations/Control Measures

52.5 pounds of volatile organic compounds (VOC) per hour

The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07 and OAC rule 3745-21-07(G)(2).

0.68 pound of hydrochloric acid (HCl) per hour from the scrubber stack

2.98 tons of HCl per year from the scrubber stack

Fugitive emissions of HCl from emissions units P001 and P002 shall not exceed 0.1 ton per year.

The emissions of VOC from emissions units P001 and P002 shall not exceed 93.0 tons of VOC per year, as a rolling 12-month summation of the monthly emissions.

The VOC content of the rust preventive oil shall not exceed 5.0 pounds of VOC per gallon of rust preventive oil.

See B.1 below.

See B.5 below.

2. Additional Terms and Conditions

- 2.a The hourly VOC emission limitation regulated per OAC rule 3745-31-05(A)(3) is based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with this limit.

B. Operational Restrictions

1. The maximum annual rust preventive oil usage for emissions units P001 and P002 shall not exceed 37,200, based upon a rolling, 12-month summation of the rust preventive oil usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Rust Preventive Oil Usage</u>
1	3,100 gallons
1-2	6,200 gallons
1-3	9,300 gallons
1-4	12,400 gallons
1-5	15,500 gallons
1-6	18,600 gallons
1-7	21,700 gallons
1-8	24,800 gallons
1-9	27,900 gallons
1-10	31,000 gallons
1-11	34,100 gallons
1-12	37,200 gallons

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual rust preventive oil usage limitation shall be based upon a rolling, 12-month summation of the rust preventive oil usage figures.

2. The pH of the scrubber liquor shall be maintained within the range of 0.4 to 7.5.
3. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water or not less than the minimum static pressure drop established during the most

recent emission test that demonstrated that the emissions unit was in compliance at all times while the emissions unit is in operation.

4. The scrubber water flow rate shall be continuously maintained at a value of not less than 150 gallons per minute or not less than the minimum water flow rate value established during the most recent emission test that demonstrated that the emissions unit was in compliance at all times while the emissions unit is in operation.
5. The permittee shall not employ any photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5), in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information monthly for emissions units P001 and P002:
 - a. the name and identification number of each rust preventive oil employed;
 - b. the VOC content of each rust preventive oil employed, in pounds per gallon;
 - c. the amount of each rust preventive oil employed, in gallons;
 - d. the total amount of all rust preventive oils employed, in gallons;
 - e. the total VOC emissions from all rust preventive oils employed, in tons (i.e., the sum of (b) times (c) for each rust preventive oil employed, then divided by 2000); and
 - f. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the rust preventive oil usage figures and the VOC emissions for each month.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative rust preventive oil usage for each calendar month.

2. The permittee shall properly operate and maintain equipment to monitor the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pH of the scrubber liquor, on a once per shift basis; and
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate 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 manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;
 - b. the scrubber water flow rate, in gallons per minute, on a once per shift basis; and
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
4. The permittee shall maintain the following information for this emissions unit:
- a. the MSDS sheets for each liquid organic material employed; and
 - b. documentation as to whether or not each material is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5).
5. The permit to install for this emissions unit (P002) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: hydrochloric acid

TLV (mg/m3): 5.49

Maximum Hourly Emission Rate (lbs/hr): 0.89*

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 94.7

MAGLC (ug/m3): 130.7

*Increase in hydrochloric acid emission rates for P001, P002, and P003.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month rust preventive oil usage limitation and the rolling, 12-month VOC limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative rust preventive oil usage levels.
2. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above.
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:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" (as defined in OAC rule 3745-21-01(C)(5)) is employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such an occurrence.
5. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a rust preventive oil which exceeds the VOC content specified in section A.1 of these terms and conditions is employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after such an occurrence.
6. The permittee shall also submit annual reports which specify the total VOC emissions from emissions units P001 and P002 combined and the total HCl emissions from emissions units P001,

P002, and P003 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

7. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions of this permit.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted six months prior to the permit to operate renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for HCl.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for HCl, Methods 1-4 and 26A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. 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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
4. 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 appropriate Ohio EPA District

Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

5. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

5.0 pounds of VOC per gallon of rust preventive oil

Applicable Compliance Method:

Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the rust preventive oil.

b. Emission Limitation:

52.5 pounds of VOC per hour

Applicable Compliance Method:

Multiply the allowable VOC content of the rust preventive oil 5.0 pounds of VOC per gallon of rust preventive oil by the maximum hourly rust preventive oil usage.

c. Emission Limitation:

The emissions of VOC from emissions units P001 and P002 shall not exceed 93.0 tons of VOC per year, as a rolling 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monthly record keeping as required by section C.1 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the rust preventive oils.

d. Emission Limitation:

0.68 pound of HCl per hour from the scrubber stack

Applicable Compliance Method:

Compliance with the allowable mass emission rate for HCl shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 26A as required by section E.1 of these terms and conditions.

e. Emission Limitation:

2.98 tons of HCl per year from the scrubber stack

Applicable Compliance Method:

Multiply the allowable hourly emission limitation by 8760 hours per year, then divide by 2000 pounds per ton.

f. Emission Limitations:

Fugitive emissions of HCl from emissions units P001 and P002 shall not exceed 0.1 ton

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Emissions Unit ID: P002

per year.

Applicable Compliance Method:

Compliance with the fugitive emissions of HCl shall be determined by employing Method 7903 IC from the National Institute of Occupational Safety and Health's Manual of Analytical Methods to determine the concentration of HCl in the area the steel pickling line and through the calculation method provided by Viking Worthing Steel Enterprise in the Permit to Install 16-02319 application.

F. Miscellaneous Requirements

1. The terms and conditions in this permit to install 16-02319 shall supercede all the air pollution control requirements for P002 in permit to install 16-1483.
2. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, B.1, B.2, B.3, B.4, B.5, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, D.5, D.6, E.1, E.2, E.3, and E.4.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P003 - Acid Regeneration Roaster (the terms and conditions in this permit supercede the terms and conditions in PTI 16-1483 issued 9/27/1995).	OAC rule 3745-31-05(A)(3) OAC rule 3745-35-07(B)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-35-07. 1.0 pound of hydrochloric acid (HCl) per hour from the scrubber stack 4.38 tons of HCl per year from the scrubber stack Fugitive emissions of HCl from emissions unit P003 shall not exceed 0.1 ton per year.

2. Additional Terms and Conditions

- 2.a None

B. Operational Restrictions

1. The permittee shall only employ potable water supplied by the local water district as the scrubber liquor.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water or not less than the minimum static pressure drop established during the most

recent emission test that demonstrated that the emissions unit was in compliance at all times while the emissions unit is in operation.

3. The scrubber water flow rate shall be continuously maintained at a value of not less than 265 gallons per minute or not less than the minimum water flow rate value established during the most recent emission test that demonstrated that the emissions unit was in compliance at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate 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 manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;
 - b. the scrubber water flow rate, in gallons per minute, on a once per shift basis; and
 - c. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permit to install for this emissions unit (P003) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: hydrochloric acid

TLV (mg/m3): 5.49

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Emissions Unit ID: P003

Maximum Hourly Emission Rate (lbs/hr): 0.89*

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 94.7

MAGLC (ug/m3): 130.7

*Increase in hydrochloric acid emission rates for P001, P002, and P003.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted,

change in stack/exhaust parameters, etc.);

- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. 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:
 - a. the static pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
2. The permittee shall also submit annual reports which specify the total HCl emissions from emissions units P001, P002, and P003 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions of this permit.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted six months prior to the permit to operate renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for HCl.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for HCl, Methods 1-4 and 26A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. 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 appropriate Ohio EPA District Office or local air agency.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
4. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.
5. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

1.0 pound of HCl per hour from the scrubber stack

Applicable Compliance Method:

Compliance with the allowable mass emission rate for HCl shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 26A as required by section E.1 of these terms and conditions.
 - b. Emission Limitation:

4.38 tons of HCl per year from the scrubber stack

Applicable Compliance Method:

Multiply the allowable hourly emission limitation by 8760 hours per year, then divide by 2000 pounds per ton.

c. Emission Limitations:

Fugitive emissions of HCl from emissions unit P003 shall not exceed 0.1 ton per year.

Applicable Compliance Method:

Compliance with the fugitive emissions of HCl shall be determined by employing Method 7903 IC from the National Institute of Occupational Safety and Health's Manual of Analytical Methods to determine the concentration of HCl in the area the steel pickling line and through the calculation method provided by Viking Worthing Steel Enterprise in the Permit to Install 16-02319 application.

F. Miscellaneous Requirements

1. The terms and conditions in this permit to install 16-02319 shall supercede all the air pollution control requirements for P003 in permit to install 16-1483.
2. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, B.1, B.2, B.3, C.1, D.1, D.2, E.1, E.2, E.3, and E.4.