



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
MONTGOMERY 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: 08-02423**

**DATE: 7/23/2002**

Hohman Plating & Mfg Inc  
Connie Bramel  
814 Hillrose Avenue  
Dayton, OH 454041199

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

RAPCA



**Permit To Install  
Terms and Conditions**

**Issue Date: 7/23/2002  
Effective Date: 7/23/2002**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 08-02423

Application Number: 08-02423  
APS Premise Number: 0857040217  
Permit Fee: **\$0**  
Name of Facility: Hohman Plating & Mfg Inc  
Person to Contact: Connie Bramel  
Address: 814 Hillrose Avenue  
Dayton, OH 454041199

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**814 Hillrose Ave  
Dayton, Ohio**

Description of proposed emissions unit(s):  
**decorative chrome plating; copper-nickel-chrome pretreatment system No. 2; copper plating system No. 3;  
Administrative modification to PTI 08-02423 issued April 7, 1993.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

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 Related to Monitoring and Recordkeeping 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

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**PTI Application: 08-02423**  
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**Facility ID: 0857040217**

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 application must be made to the Director for the installation or modification of any other emissions unit(s).

**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**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or

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modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

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- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 thirty (30) days after commencing operation of the source(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>
chromium	0.0016
hydrochloric acid	0.26
sodium hydroxide	0.26
potassium cyanide	0.25
potassium hydroxide	1.10
copper	0.18

**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>
P016 - Decorative chrome plating system No. 1, with packed bed tower scrubber and inline mist eliminator (Tanks: AC.EP.DC.721 and NT.PW.HW.715) (modification)	OAC rule 3745-31-05(A)(3)	0.00037 lb/hour and 0.0016 TPY chromium
	40 CFR Part 63 Subpart N	The permittee shall control chromium emissions discharged to the atmosphere by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.01 mg/dscm (4.4 x 10 <sup>-6</sup> gr/dscf).
	OAC rule 3745-17-11(B)(1)	0.551 lb/hour particulates
	OAC rule 3745-17-07(A)(1)	Visible emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

**2. Additional Terms and Conditions**

- 2.a None

**B. Operational Restrictions**

- 1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any chromium electroplating or anodizing tank, including associated air pollution control devices and monitoring equipment, in a manner consistent with the operation and maintenance plan required by these terms and conditions.

2. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan.
  
3. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the appropriate Ohio EPA District Office or local air agency, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the emission unit. Based on this information, the appropriate Ohio EPA District Office or local air agency may require that the permittee make changes to the operation and maintenance plan if that plan:
  - a. does not address a malfunction that has occurred;
  - b. fails to provide for the operation of the emission units, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution practices; or
  - c. does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
  
4. The permittee shall prepare an operation and maintenance plan to be implemented no later than January 25, 1996. The plan shall be incorporated by reference into the Title V permit, if and when a Title V permit is required, and include the following elements:
  - a. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emissions limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of the equipment.
  - b. The O/M plan shall incorporate the following work practice standards:
    - i. Visually inspect at least once per quarter the device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
    - ii. Visually inspect at least once per quarter the back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist.

Emissions Unit ID: **P016**

- iii. Visually inspect at least once per quarter the ductwork from the tank to the control device to ensure there are no leaks.
- iv. Add fresh makeup water to the top of the packed bed as needed. If greater than 50 percent of the scrubber water is drained (e.g., for maintenance purposes), makeup water may be added to the scrubber basin.
- c. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.
- d. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment, and for implementing corrective actions to address such malfunctions.
- e. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan within 45 days after such an event occurs.
- f. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report such actions by phone within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the appropriate Ohio EPA District Office or local air agency.
- g. The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the appropriate Ohio EPA District Office or local air agency for the life of the emission unit. If the operation and maintenance plan is revised, the permittee shall keep previous versions of the plan on record to be made available for inspection, upon request, by the appropriate Ohio EPA District Office or local air agency for a period of five years after each revision to the plan.
- h. The permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans to meet the operation and maintenance plan requirements as long as the alternative plans meet the requirements.

### **C. Monitoring and/or Recordkeeping Requirements**

1. Packed-bed scrubber system monitoring requirements to demonstrate continuous compliance

The permittee shall monitor and record the velocity pressure at the inlet to the packed-bed scrubber and the pressure drop across the scrubber system once each day that the emission unit is operating. To be in compliance, the scrubber system shall be operated within plus or minus 10 percent of the velocity pressure value established during the initial performance test, and within plus or minus 1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant operating parameter values established during multiple performance tests.
2. The permittee shall fulfill all recordkeeping requirements in the General Provisions to 40 CFR Part 63, according to the applicability of Subpart A as identified in Table 1 to Subpart N.
3. The permittee also shall maintain the following records:
  - a. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of this permit have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
  - b. Records of all maintenance performed on the emissions unit, add-on air pollution control device, and monitoring equipment.
  - c. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control device, and monitoring equipment.
  - d. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
  - e. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan.
  - f. Test reports documenting results of all performance tests.
  - g. All measurements as may be necessary to determine the conditions of performance tests.
  - h. Records of monitoring data that are used to demonstrate compliance with the standard

including the date and time the data are collected.

- i. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control device, or monitoring equipment.
- j. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control device, or monitoring equipment.
- k. The total process operating time of the emission unit during the reporting period.
- l. All documentation supporting the notifications and reports as outlined in the Reporting Requirements of this permit and Sections 63.9 and 63.10 of 40 CFR Part 63, subpart A.

All records shall be maintained for a period of five years.

**D. Reporting Requirements**

1. The permittee shall fulfill all reporting requirement as outlined in 40 CFR Part 63 Subpart A as identified in Table 1 to Subpart N. These reports shall be made to the appropriate Ohio EPA District Office or local air agency and shall be sent by U.S. mail, fax or by another courier.
  - a. Submittals sent by U.S. mail shall be postmarked on or before the specified date.
  - b. Submittals sent by other methods shall be received by the appropriate Ohio EPA District Office or local air agency on or before the specified date.
2. The permittee shall prepare an ongoing compliance status report annually (unless a request to reduce frequency of ongoing compliance status reports has been approved) to the appropriate Ohio EPA District Office or local air agency to document the ongoing compliance status of the emissions unit. This report shall include the following:
  - a. The company name and address of the emissions unit.
  - b. An identification of the operating parameter that is monitored for compliance determination.
  - c. The relevant emission limitation for the emissions unit, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the Notification of Compliance Status required by this section.
  - d. The beginning and ending dates of the reporting period.
  - e. The total operating time of the emissions unit during the reporting period.
  - f. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total emissions unit operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes.
  - g. A certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the emissions unit.

- h. If the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit.
  - i. A description of any changes in monitoring, processes, or controls since the last reporting period.
  - j. The name, title, and signature of the responsible official who is certifying the accuracy of the report.
  - k. The date of the report.
  - l. The report shall be completed annually and retained on site, and made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.
3. The permittee shall submit semiannual reports if the following conditions are met:
- a. the total duration of excess emissions is one percent or greater of the total operating time for the reporting period; and
  - b. the total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.
4. The appropriate Ohio EPA District Office or local air agency may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the emissions unit.
5. The permittee who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report on site if all of the following conditions are met:
- a. For 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected emissions unit is in compliance with the relevant emission limit.
  - b. The permittee continues to comply with all applicable recordkeeping and monitoring requirements of 40 CFR Part 63, Subpart A and this permit.

- c. The appropriate Ohio EPA District Office or local air agency does not object to a reduced reporting frequency. The frequency of submitting ongoing compliance status reports may be reduced if the following requirements are met:
  - i. The permittee notifies the appropriate Ohio EPA District Office or local air agency in writing of its intentions to make such a change. The [local air agency or district office] may review information concerning the facility's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the emission unit's compliance date, whichever is shorter. Records subject to review include performance test results, monitoring data, and evaluations of the permittee's conformance with emission limitations and work practice standards. If the permittee's request is disapproved, the appropriate Ohio EPA District Office or local air agency will notify the permittee in writing within 45 days after receiving notice. This notification will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
  - ii. If monitoring data show that the emissions unit is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the permittee shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the permittee may again request approval to reduce the reporting frequency.

## **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.00037 lb/hour chromium  
  
Applicable Compliance Method -  
Compliance with this allowable emission rate was demonstrated in a performance test conducted on April 27, 1995 with results showing an average total chromium emission rate of 0.0000381 lb/hour. Ongoing compliance shall be based upon the established operating parameters for the pressure drop across the packed bed scrubber control system and the velocity pressure at the common inlet of the control device. If required, additional performance testing shall be conducted in accordance with the methods and procedures specified in 40 CFR Part 63 Subpart N.

- b. Emission Limitation -  
0.0016 TPY chromium

Applicable Compliance Method -

The annual mass emission limitation of 0.0016 TPY was developed by multiplying the hourly emission rate of 0.00037 lb/hour by a maximum operating schedule of 8760 hours/year. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. Emission Limitation -  
0.01 mg/dscm ( $4.4 \times 10^{-6}$  gr/dscf) total chromium in exhaust gases

Applicable Compliance Method -

A performance test was conducted on April 27, 1995 with results showing a chromium emission rate of 0.0044 mg/dscm. If required, additional performance testing shall be conducted in accordance with the test methods and procedures specified in 40 CFR Part 63 Subpart N. Ongoing compliance shall be based upon the established operating parameters for the pressure drop across the packed bed scrubber control system and the velocity pressure at the common inlet of the control device.

- d. Emission Limitation -  
0.551 lb/hour particulates

Applicable Compliance Method -

Compliance shall be determined by calculations using air emissions models specified in the Metal Finishing Facility Risk Screening Tool (MFFRST), EPA/600/R-01/057, July 2001. If required, compliance with this mass emission limitation shall be based upon stack testing in accordance with OAC rule 3745-17-03(B)(10).

- e. Emission Limitation -  
20% opacity, as a six-minute average

Applicable Compliance Method -

Compliance shall be determined by visible emission evaluations performed in accordance with procedures specified in OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

2. When multiple affected emissions units performing the same type of operation and subject to the same emission limitation are controlled with a common add-on air pollution control device that is also controlling emissions from emissions units not affected by the Chromium Electroplating MACT, the following procedure shall be followed to determine compliance with the emission limitation of 0.01 mg/dscm ( $4.4 \times 10^{-6}$  gr/dscf):
- Calculate the cross-sectional area of each inlet duct (i.e., uptakes from each hood) including those emissions units not subject to 40 CFR part 63 subpart N.
  - Determine the total sample time per test run by dividing the total inlet area from all tanks connected to the control system by the total inlet area for all ducts associated with subject emissions units, and then multiply this number by 2 hours. The calculated time is the minimum sample time required per test run.
  - Perform Method 306 testing and calculate an outlet mass emission rate.

- d. Determine the total ventilation rate from the affected tanks by using the following equation:

$$VR(\text{tot}) \times [ (IDA(i)) / ([\text{sum}] IA(\text{total})) ] = VR(\text{inlet})$$

where

VR(tot) is the average total ventilation rate in dscm/min for the three test runs as determined at the outlet by means of the Method 306 testing;

IDA(i) is the total inlet area for all ducts associated with affected tanks;

[sum] IA(total) is the sum of all inlet duct areas from both affected and nonaffected tanks; and,

VR(inlet) is the total ventilation rate from all inlet ducts associated with affected tanks.

- e. Establish the allowable mass emission rate of the system (AMR(sys)) in milligrams of total chromium per hour (mg/hr) using the following equation:

$$[\text{sum}] VR(\text{inlet}) \times EL \times 60 \text{ minutes/hour} = AMR(\text{sys})$$

where

[sum] VR(inlet) is the total ventilation rate in dscm/min from the affected tanks, and EL is the applicable emission limitation. The allowable mass emission rate (AMR(sys)) should be equal to or greater than the outlet three-run average mass emission rate determined from Method 306 testing for the tank to be in compliance.

## **F. Miscellaneous Requirements**

None

**Hohm****PTI A****Modification Issued: 7/23/2002**Emissions Unit ID: **P017****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>
P017 - Copper-Nickel-Chrome Pretreatment System No. 2, with packed bed scrubber control system (Tanks: AC.AP.HA.704, AC.AP.HF.705, AK.CL.NE.708, AK.CL.RC.707, and NT.PW.CW.703) (modification)	OAC rule 3745-31-05(A)(3)	0.06 lb/hour and 0.26 TPY hydrochloric acid
	OAC rule 3745-17-07(A)(1)	0.06 lb/hour and 0.26 TPY sodium hydroxide (NaOH) (as particulates)
	OAC rule 3745-17-11(B)(1)	Visible emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule.  The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions****2.a** None**B. Operational Restrictions**

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 1 inch of water at all times while the emissions unit is in operation.
2. The scrubber water flow rate shall be continuously maintained at a value of not less than 3 gallons

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**Modif**

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per minute at all times while the emissions unit is in operation.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall properly 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.
2. The permittee shall collect and record the following information each day:
  - a. The pressure drop across the scrubber, in inches of water.
  - b. The scrubber water flow rate, in gallons per minute.
  - c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

**D. Reporting Requirements**

1. In accordance with Section A.2. of the General Terms and Conditions of this permit, the permittee shall submit quarterly deviation reports that identify all periods of time during which the static pressure drop across the scrubber and/or the scrubber water flow rate were not maintained at or above the required levels.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.06 lb/hour hydrochloric acid  
  
Applicable Compliance Method -  
Compliance shall be determined by calculations using air emissions models specified in the Metal Finishing Facility Risk Screening Tool (MFFRST), EPA/600/R-01/057, July 2001. Ongoing compliance shall be based upon the established operating parameters for the packed bed scrubber control system.
  - b. Emission Limitation -

## 7.10.26 TPY hydrochloric acid

## Applicable Compliance Method -

The 0.26 TPY limitation was developed by multiplying the hourly emission rate of 0.06 lb/hour by the maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance is also shown with the annual limitation.

- c. Emission Limitation -  
0.06 lb/hour NaOH (as particulates)

## Applicable Compliance Method -

Compliance shall be determined by calculations using air emissions models specified in the Metal Finishing Facility Risk Screening Tool (MFFRST), EPA/600/R-01/057, July 2001. Ongoing compliance shall be based upon the established operating parameters for the packed bed scrubber control system.

- d. Emission Limitation -  
0.26 TPY NaOH (as particulates)

## Applicable Compliance Method -

The 0.26 TPY limitation was developed by multiplying the hourly emission rate of 0.06 lb/hour by the maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance is also shown with the annual limitation.

- e. Emission Limitation -  
20% opacity, as a six-minute average

## Applicable Compliance Method -

Compliance shall be determined by visible emission evaluations performed in accordance with the procedures specified in OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. 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

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permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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**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>
<u>P018 - Copper Plating System No. 2 (modification)</u>	OAC rule 3745-31-05(A)(3)	0.06 lb/hour and 0.25 TPY potassium cyanide (as particulates)
		0.25 lb/hour and 1.10 TPY potassium hydroxide (as particulates)
		0.04 lb/hour and 0.18 TPY copper (as particulates)
	OAC rule 3745-17-07(A)(1)	Visible emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a The lb/hour and TPY emission limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

**B. Operational Restrictions**

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None

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**C. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit (P018) was evaluated based on the actual 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: potassium hydroxide

TLV (mg/m<sup>3</sup>): 2 (ceiling)

Maximum hourly emission rate (lb/hour): 0.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 10.78

MAGLC (ug/m<sup>3</sup>): 35

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.

- 2. 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**

None

**E. Testing Requirements**

- 1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.06 lb/hour potassium cyanide (as particulates)  
  
Applicable Compliance Method -  
Compliance is determined by calculations using air emissions models specified in the Metal

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- b. Emission Limitation -  
0.26 TPY potassium cyanide (as particulates)

Applicable Compliance Method -

The 0.26 TPY emission limitation was developed by multiplying the 0.06 lb/hour emission rate and a maximum annual operating schedule of 8760 hours/year, divided by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

- c. Emission Limitation -  
0.25 lb/hour potassium hydroxide (as particulates)

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Applicable Compliance Method -  
Compliance is based upon calculations using air emissions models specified in the Metal Finishing Facility Risk Screening Tool (MFFRST), EPA/600/R-01/057, July 2001.

- d. Emission Limitation -  
1.10 TPY potassium hydroxide (as particulates)

Applicable Compliance Method -  
The 1.10 TPY emission limitation was developed by multiplying the 0.25 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

- e. Emission Limitation -  
0.04 lb/hour copper (as particulates)

Applicable Compliance Method -  
Compliance is based upon calculations using air emissions models specified in the Metal Finishing Facility Risk Screening Tool (MFFRST), EPA/600/R-01/057, July 2001.

- f. Emission Limitation -  
0.18 TPY copper (as particulates)

Applicable Compliance Method -  
The 0.18 TPY emission limitation was developed by multiplying the 0.04 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

- g. Emission Limitation -  
20% opacity, as a six-minute average

Applicable Compliance Method -  
Compliance shall be determined by visible emission evaluations performed in accordance with the procedures specified in OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

**F. Miscellaneous Requirements**

None