State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

Certified Mail

9/10/2008

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

Philip Baustian
Unico Alloys and Metals, Inc.
1177 Joyce Ave
Columbus, OH 43219

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0125043247
Permit Number: P0103789
Permit Type: Renewal
County: Franklin

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Central District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-CDO

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install and Operate
for
Unico Alloys and Metals, Inc.

Facility ID:	0125043247
Permit Number:	P0103789
Permit Type:	Renewal
Issued:	9/10/2008
Effective:	9/10/2008
Expiration:	9/10/2018

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate
for
Unico Alloys and Metals, Inc.

Table of Contents

Authorization 1

A. Standard Terms and Conditions 3

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

B. Facility-Wide Terms and Conditions 8

C. Emissions Unit Terms and Conditions 10

1. L001, Batch degreaser 11
2. L002, Continuous degreaser 20
3. P001, Crusher, aqueous wash and rinse with electric dryers 27
4. P002, Torching and cutting booth 30
5. P003, Titanium alloys shot blaster 34
6. P004, Shot blasters 38

Authorization

Facility ID: 0125043247
Application Number(s): A0035796
Permit Number: P0103789
Permit Description: Nickel and titanium alloy torching, cutting, and shredding with solvent degreasing and aqueous detergent wash and drying.
Permit Type: Renewal
Permit Fee: $0.00
Issue Date: 9/10/2008
Effective Date: 9/10/2008
Expiration Date: 9/10/2018
Permit Evaluation Report (PER) Annual Date: May 15, for Apr 1 - Mar 31
This document constitutes issuance to:

Unico Alloys and Metals, Inc.
1177 Joyce Ave
Columbus, OH 43219

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0103789
Permit Description: Nickel and titanium alloy torching, cutting, and shredding with solvent degreasing and aqueous detergent wash and drying.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID:	**L001**
Company Equipment ID:	Batch degreaser
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**L002**
Company Equipment ID:	Continuous degreaser
Superseded Permit Number:	01-12252
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P001**
Company Equipment ID:	Crusher, aqueous wash and rinse with electric dryers
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	Torching and cutting booth
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	Titanium alloys shot blaster
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	Shot blasters
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) None.

C. Emissions Unit Terms and Conditions

1. L001, Batch degreaser

Operations, Property and/or Equipment Description:

Open top vapor degreaser (n-propyl bromide) with cover, refrigerated condenser and carbon absorbtion system (300 lbs/hr)

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

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

a. D)(4).

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E) (to avoid BAT applicability) (PTI 01-12252)	Volatile organic compound (VOC) emissions shall not exceed 8.5 tons/yr. See (2)a, below.
b.	OAC rule 3745-21-09(O)(3)(a)&(b)	See (2)b-d, and c)(1)–(2), below.

(2) Additional Terms and Conditions

a. "Permit to Install 01-12252 for this air contaminant source takes into account the following rule-based restrictions specified in section (2)b, (2)c, and (2)d (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

b. The open top vapor degreaser shall be equipped with and shall employ a cover and safety switches as described below:

i. The cover shall be installed so that it can be opened and closed easily without disturbing the vapor zone.

ii. A condenser flow switch and thermostat (or other such device) shall shut off the sump heat, if the condenser coolant is either not circulating or too warm.

iii. If using a spray application, a spray safety switch shall shut off the spray pump if the vapor level drops below any fixed spray nozzle.

iv. A vapor level control thermostat (or other such device) shall shut off the sump heat when the vapor level rises too high.

v. A water flow switch or water pressure switch (or other such device) shall shut off the sump heat if the water in a water-cooled condenser has no flow or no pressure, whichever is being monitored.

[OAC rule 3745-21-09(O)(3)(a) and (b)]

c. The permittee shall install and employ a carbon adsorption system, that shall be operated at all times, except during maintenance, to control VOC emissions from the open top vapor degreaser. The carbon adsorption system shall be operated with a ventilation rate greater than or equal to 50 cubic feet per minute per square foot of air/solvent interface (when the downtime cover is open) and shall exhaust less than 25 parts per million of solvent by volume, averaged over a complete adsorption cycle.

[OAC rule 3745-21-09(O)(3)(c)(iv)]

d. The cover or door to the open top vapor degreaser shall open only when the dry part is actually entering or exiting the degreaser.

[OAC rule 3745-21-09(O)(3)(c)(iii)]

c) Operational Restrictions

(1) The open top vapor degreaser shall be installed with a refrigerated chiller that shall be operated to control the temperature of the solvent during cleaning operations.

[OAC rule 3745-21-09(O)(3)(c)(ii)]

(2) The open top vapor degreaser shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:

a. The cover shall be kept closed at all times except when processing work loads through the degreaser.

b. Solvent carry-out shall be minimized by:

i. racking parts so that solvent drains freely and is not trapped;

ii. moving parts in and out of the degreaser at less than 11 feet per minute;

iii. holding the parts in the vapor zone at least 30 seconds or until condensation ceases, whichever is longer;

iv. tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

v. allowing parts to dry within the degreaser for at least 15 seconds or until visually dry, whichever is longer.

c. Porous and/or absorbent materials shall not be cleaned.

d. Workloads shall occupy no more than one-half of the degreaser=s open-top area.

e. Solvent spraying shall only be conducted within the vapor level.

f. Solvent leaks shall be repaired immediately, or the degreaser shall be shut down.

g. Solvent waste shall only be stored in covered containers.

h. The degreased shall be operated so that water cannot be visually detected in solvent exiting the water separator.

i. No ventilation fans shall be used near the degreaser opening.

j. When the cover is open, the open top vapor degreaser shall not be exposed to drafts greater than 131 feet per minute, as measured between 3 and 6 feet upwind and at the same elevation as the tank lip.

k. If a lip exhaust is used on the open top vapor degreaser, the ventilation rate shall not exceed 65 cubic feet per minute per square foot of degreaser open area, unless a higher rate is necessary to meet Occupational Safety and Health Administration requirements.

l. A permanent, conspicuous label, summarizing the operating procedures shall be posted on or near to the degreaser.

[OAC rule 3745-21-09(O)(3)(d)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of solvents employed in the open top vapor degreaser, including the chemical name(s) and concentration(s);

b. all maintenance conducted on the refrigerated chiller, including the date and activity; and

c. the temperature (or temperature range) at which each cleaning solvent is maintained.

These records shall be maintained for at least 5 years and shall be made available to the director or his representative upon verbal or written request.

[OAC rule 3745-21-09(O)(5)-in part]

(2) The permittee shall maintain records of the following information:

a. the types of solvents employed in the open top vapor degreaser, including the chemical name(s) and concentration;

b. all control equipment maintenance, including the date of replacement of the carbon or desorption of the carbon in the carbon adsorption unit; and

c. the results of any tests conducted to demonstrate compliance with the ventilation rate requirement of 50 cubic feet per minute, per square foot of air solvent interface; and/or the limitation of 25 parts per million solvent by volume, as an average over one adsorption cycle.

These records shall be maintained for at least 5 years and shall be made available to the director or his representative upon verbal or written request.

[OAC rule 3745-21-09(O)(5)(a) and (b)]

(3) The permittee shall maintain records of the following information, collected at the end of each year:

a. the total cleaning solvent added to the open top vapor degreaser or the amount purchased for use in the emissions unit during the year;

b. the total amount of solvent collected for disposal and/or recovery and shipped off-site during the year; and

c. the estimated annual VOC emissions from this emissions unit, calculated using the difference between the solvent used or purchased and the used solvent shipped offsite, adjusting the units to calculate the emissions in tons/year.

(4) The **PTIO** application for these emissions units, **L001, L002**, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute@, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A@, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic

compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices@; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices@; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A**8**@ hours per day and A**5**@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

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

Toxic Contaminant: n-propyl bromide (1-bromopropane).

TLV (mg/m3): 50.3 mg/m3

Maximum Hourly Emission Rate (lbs/hr): 6 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 394

MAGLC (ug/m3): 1197.6

The permittee, has demonstrated that emissions of **n-propyl bromide** from emissions units **L001, L002** is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the

predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the AToxic Air Contaminant Statute@ will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports documenting any period of time during which the refrigerated chiller was not in operation during cleaning operations, and/or any period of time during which the open top vapor degreaser was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.

[OAC rule 3745-21-09(O)(3)(c)(ii)]

(2) The permittee shall submit quarterly deviation reports documenting any period of time in which the carbon adsorption system was not provided ventilation greater than or equal to 50 cubic feet per minute per square foot of air/solvent interface (when the cover was open) and/or the carbon adsorption system exhausted more than 25 parts per million of solvent, averaged over one complete adsorption cycle, during cleaning operations; and/or any period of time during which the open top vapor degreaser was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.

[OAC 3745-21-09(O)(3)(c)(iv)]

(3) The permittee shall submit quarterly deviation reports documenting any period of time during which the cover or door was open when parts were not actually entering or exiting the open top vapor degreaser; and/or any period of time during which the open top vapor degreaser was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit..

[OAC rule 3745-21-09(O)(3)(c)(iii)]

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

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

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(5) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) 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.

a. Emission Limitation:

VOC emissions shall not exceed 8.5 tons/yr

Applicable Compliance Method:

Compliance with the annual emission limit listed in b)(1) of 8.5 tons VOC per year is demonstrated by multiplying the annual consumption of solvent in gallons (required in d)(3)c) by the density of n propyl bromide and dividing by 2,000 lbs/ton (1,555 gallons * 11.25 lbs/gallon * 1 ton/2,000 lbs = 8.5 tons VOC/yr).

b. The permittee shall quantify VOC emissions through a material balance test, conducted for a sufficient period of time to compute an average emission rate. The following procedures shall be implemented in order to perform this material balance test and document the average VOC emissions from this emissions unit:

i. the degreaser sump shall be cleaned before testing begins;

ii. record the amount of initial solvent and make-up solvent added to the tank with a flow meter or other means of measurement of the volume or weight;

iii. maintain a record of the type and amount or weight of work load or parts degreased/cleaned each day or over the period of the test;

iv. at the end of the test period (which can coincide with the normal solvent replacement cycle) pump out the used solvent and measure the amount, using a flow meter or other means of measurement of the volume or weight;

v. record the time of averaging for the test period and/or the number of parts cleaned, i.e., the number of hours or days passing and/or the number of

parts cleaned, from the time fresh solvent is first added to the solvent cleaner (Ab@) to the removal of the used solvent;

vi. bottle a sample of the used solvent and have it analyzed* for the percent oil, metal chips, and other contaminants;

vii. calculate** the total of VOC emissions from the emissions unit during the test period, which shall equal the total solvent added to the tank minus the solvent contained in the recovered used solvent sent offsite for disposal or recovery; and

viii. calculate the average VOC emissions rate by dividing the total emissions calculated in Ag@ by the total hours of the test period or total parts cleaned during the test period as recorded in Ae@.

* The oil and solvent proportions can be estimated by weighing samples of used solvent before and after boiling off the solvent.

** If solvent measurements are recorded by volume the density of the solvent shall be used to convert gallons to pounds.

[OAC rule 3745-21-10(D)]

g) Miscellaneous Requirements

(1) None.

2. L002, Continuous degreaser

Operations, Property and/or Equipment Description:

Conveyorized degreaser (n-propyl bromide) with spray nozzles, refrigerated freeboard chiller, carbon adsorption system, distillation column and water vapor from carbon regeneration evaporator (1,000 lbs/hr)

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (modification of PTI 01-12252 issued 5/13/07)	Volatile organic compound (VOC) emissions shall not exceed 17.0 tons/yr.
b.	OAC rule 3745-21-09(O)(4)	See (2)a-d and c)(1) below.

(2) Additional Terms and Conditions

a. The conveyorized vapor degreaser shall retain the parts in the vibrating vertical auger for a sufficient amount of time to prevent cleaned parts from carrying out solvent liquid or vapor.

[OAC rule 3745-21-09(O)(4)(b)]

b. The following safety switches shall be installed, operated, and maintained for the conveyorized degreaser where the solvent is heated to its boiling point:

i. a condenser flow switch and thermostat (or any other device serving the same purpose) that shuts off the sump heat if the condenser coolant is either not circulating or too warm; and

ii. a vapor level control thermostat (or any other device serving the same purpose) that shuts off the sump heat when the vapor level rises too high.

[OAC rule 3745-21-09(O)(4)(c)]

c. The permittee shall install and employ a carbon adsorption system, that shall be operated at all times, except during maintenance, to control VOC emissions from the conveyorized degreaser. The carbon adsorption system shall be operated with a ventilation rate greater than or equal to 50 cubic feet per minute per square foot of air/solvent interface (when downtime covers are open) and shall exhaust less than 25 parts per million of solvent by volume, averaged over a complete adsorption cycle.

[OAC rule 3745-21-09(O)(4)(a)(ii)]

d. The conveyorized degreaser shall be installed with a refrigerated chiller that shall be operated to control the temperature of the solvent during cleaning operations.

[OAC rule 3745-21-09(O)(4)(a)(i)]

c) Operational Restrictions

(1) The conveyorized degreaser shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:

a. Workplace fans shall not be placed near the degreaser opening, and exhaust ventilation shall not exceed 65 cubic feet per minute per square foot of degreaser opening, unless a higher rate is necessary to meet Occupational Safety and Health Administration requirements.

b. Openings to the converyorized degreaser shall be minimized during operation, so that entrances and exits silhouette workloads, with an average clearance between the parts and the edge of the degreaser opening of less than 10 percent of the width of the opening.

c. The conveyorized degreaser shall be provided with downtime covers for closing off the entrance and exit during shutdown hours.

d. Emissions from carry-out shall be minimized by:

i. racking parts so that solvent drains freely from parts and is not trapped; and

ii. maintaining the vertical conveyor speed at less than 11 feet per minute.

e. Waste solvent shall be stored in covered containers.

f. Solvent leaks shall be repaired immediately, or the degreaser shall be shut down.

g. The conveyorized degreaser shall be operated such that water cannot be visually detected in solvent exiting the water separator.

h. Downtime covers shall be placed over entrances and exits of the conveyorized degreaser at all times when the conveyors and exhausts are not being operated.

i. Porous and/or absorbent materials shall not be cleaned in the conveyorized degreaser.

[OAC rule 3745-21-09(O)(4)(e)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information:

a. the types of solvents employed in the conveyorized degreaser, including the chemical name(s) and concentration;

b. all control equipment maintenance, including the date of replacement of the carbon or desorption of the carbon in the carbon adsorption unit;

c. all maintenance conducted on the refrigerated chiller, including the date and activity. and

d. the results of any tests conducted to demonstrate compliance with the ventilation rate requirement of 50 cubic feet per minute, per square foot of air solvent interface; and the limitation of 25 parts per million solvent by volume, as an average over one adsorption cycle.

These records shall be maintained for at least 5 years and shall be made available to the director or his representative upon verbal or written request.

[OAC rule 3745-21-09(O)(5)(a) and (b)]

(2) The permittee shall maintain records of the following information, collected at the end of each year:

a. the total cleaning solvent added to the conveyorized degreaser or the amount purchased for use in the emissions unit during the year;

b. the total amount of solvent collected for disposal and/or recovery and shipped off-site during the year; and

c. the estimated annual VOC emissions from this emissions unit, calculated using the difference between the solvent used or purchased and the used solvent shipped offsite, adjusting the units to calculate the emissions in tons/year.

[OAC rule 3745-21-09(O)(5)-in part]

(3) The **PTIO** application for these emissions units, **L001, L002**, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute@, ORC

3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A@, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices@; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices@; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A**8**@ hours per day and A**5**@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

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

   Toxic Contaminant: n-propyl bromide (1-bromopropane).

   TLV (mg/m3): 50.3 mg/m3

   Maximum Hourly Emission Rate (lbs/hr): 6 lbs/hr

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 394

MAGLC (ug/m3): 1197.6

The permittee, has demonstrated that emissions of **n-propyl bromide** from emissions units **L001, L002** is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports documenting any period of time in which the carbon adsorption system was not provided ventilation greater than or equal to 50 cubic feet per minute per square foot of air/solvent interface (when the cover(s) was/were open) and/or the carbon adsorption system exhausted more than 25 parts per million of solvent, averaged over one complete adsorption cycle.

[OAC rule 3745-21-09(O)(4)(a)(ii)]

(2) The permittee shall submit quarterly deviation reports documenting any period of time during which the refrigerated chiller was not in operation during cleaning operations; and/or any period of time during which the conveyorized degreaser was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.

[OAC rule 3745-21-09(O)(4)(a)(i)]

(3) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) 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.

a. Emissions Limitation:

VOC emissions shall not exceed 17.0 tons/yr

Applicable Compliance Method:

Compliance with the annual emission limit listed in b)(1) of 17.0 tons VOC per year is demonstrated by multiplying the annual consumption of solvent in gallons (required in d)(2)c) by the density of n propyl bromide and dividing by 2,000 lbs/ton (3,028 gallons * 11.25 lbs/gallon * 1 ton/2,000 lbs = 17.0 tons VOC/yr).

b. The permittee shall quantify VOC emissions through a material balance test, conducted for a sufficient period of time to compute an average emission rate. The following procedures shall be implemented in order to perform this material balance test and document the average VOC emissions from this emissions unit:

i. the degreaser sump shall be cleaned before testing begins;

ii. record the amount of initial solvent and make-up solvent added to the tank with a flow meter or other means of measurement of the volume or weight;

iii. maintain a record of the type and amount or weight of work load or parts degreased/cleaned each day or over the period of the test;

iv. at the end of the test period (which can coincide with the normal solvent replacement cycle) pump out the used solvent and measure the amount, using a flow meter or other means of measurement of the volume or weight;

v. record the time of averaging for the test period and/or the number of parts cleaned, i.e., the number of hours or days passing and/or the number of parts cleaned, from the time fresh solvent is first added to the solvent cleaner (Ab@) to the removal of the used solvent;

vi. bottle a sample of the used solvent and have it analyzed* for the percent oil, metal chips, and other contaminants;

vii. calculate** the total of VOC emissions from the emissions unit during the test period, which shall equal the total solvent added to the tank minus the solvent contained in the recovered used solvent sent offsite for disposal or recovery; and

viii. calculate the average VOC emissions rate by dividing the total emissions calculated in Ag@ by the total hours of the test period or total parts cleaned during the test period as recorded in Ae@.

* The oil and solvent proportions can be estimated by weighing samples of used solvent before and after boiling off the solvent.

** If solvent measurements are recorded by volume the density of the solvent shall be used to convert gallons to pounds.

[OAC rule 3745-21-10(D)]

g) Miscellaneous Requirements

(1) None.

3. P001, Crusher, aqueous wash and rinse with electric dryers

Operations, Property and/or Equipment Description:

Crusher with detergent wash, aqueous rinse and electric dryer

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E) (to avoid BAT applicability)	Particulate emissions (PE) shall not exceed 0.65 ton/yr. See (2)a, below.
b.	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from vents, windows and/or doors from the building housing this emissions unit shall not exceed 20% opacity, as a 3-minute average.
c.	OAC rule 3745-17-11 (A)(2)	See (2)b, below.

(2) Additional Terms and Conditions

a. "Permit to Install 01-12252 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. the use of oiled metal turnings within a partially enclosed shredder; and

ii. processing of shredded turnings in detergent wash with rinse prior to electric drying.

b. The use of oiled turnings in the shredder and detergent wash with rinse prior to the dyer is integral to the operation of this emissions unit. Therefore, this emissions unit is operating in compliance with this rule as long as the permittee maintains compliance with the terms and conditions of this permit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) 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.

a. Emissions Limitation:

PE emissions shall not exceed 0.65 ton/yr.

Applicable Compliance Method

The permittee may demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(0.1 lb PE/ton SCC Code 3-04-010-07) x 1.5 tons = 0.15 lb/hr] times the annual operating hours (8,760 hours/yr), and then dividing by 2,000 lbs/ton equal 0.65 ton PE/yr.

b. Emission Limitation:

Visible fugitive PE from vents, windows and/or doors from the building housing this emissions unit shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A. Method 9 and the procedures are specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

4. P002, Torching and cutting booth

Operations, Property and/or Equipment Description:

Torching and cutting booths vented to a baghouse

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E) (to avoid BAT applicability)	Particulate emissions (PE) shall not exceed 0.1 ton/yr. See (2)a, below.
b.	OAC rule 3745-17-07(A)(1)(b)	Visible PE from the exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(A)(2)	See (2)b, below.

(2) Additional Terms and Conditions

a. "Permit to Install 01-12252 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. use of a baghouse system, whenever this air contaminant source is in operation, with a minimum 95% capture efficiency with venting to a baghouse that achieves 99% control efficiency, by weight for PE.

b. The operation of the dust collector is integral to the operation of the shot blast. Therefore, this emissions unit is operating in compliance with this rule as long as the permittee maintains compliance with the terms and conditions of this permit.

c) Operational Restrictions

(1) The pressure drop across the baghouse controlling emissions from emissions unit shall be maintained within the range of 3 to 6 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on weekly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) 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.

a. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.1 ton/yr.

Applicable Compliance Method

The permittee may demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(5.2 pounds PM10/1000 lb metal SCC 3-09-052-54) x 3000 lbs x (0.90 capture) x (1 - 0.99) = 0.016 lb/hr] by the annual operating hours (8,760hours/yr) and then dividing by 2000 lbs/ton equal 0.07 ton/yr.

b. Emission Limitation:

Visible PE from the exhaust stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A. Method 9 and the procedures are specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

5. P003, Titanium alloys shot blaster

Operations, Property and/or Equipment Description:

Wheelabrator shotblasters (2) vented to baghouse

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E) (to avoid BAT applicability)	Particulate emissions (PE) shall not exceed 0.3 ton/yr. See (2)a, below
b.	OAC rule 3745-17-07(A)(1)(b)	Visible PE from the exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-11 (A)(2)	See (2)b, below.

(2) Additional Terms and Conditions

a. Permit to Install 01-12252 for this air contaminant source takes into account the use of a baghouse system, whenever this air contaminant source is in operation, with a minimum 100% capture efficiency with venting to a baghouse that achieves 99% control efficiency, by weight for PE, as a voluntary restriction. The permittee proposed this restriction for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05.

b. The operation of the dust collector is integral to the operation of the shot blast. Therefore, this emissions unit is operating in compliance with this rule as long as the permittee maintains compliance with the terms and conditions of this permit.

c) Operational Restrictions

(1) The pressure drop across the baghouse controlling emissions from emissions unit shall be maintained within the range of 2 to 4 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on weekly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) 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.

a. Emissions Limitation:

PE shall not exceed 0.3 ton/yr.

Applicable Compliance Method

The permittee may demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(0.69 pounds PM /1,000 lbs SCC 3-09-002-04) x 1,000 lbs/hr x (1 - 0.99) = 0.01 lbs PE/hr multiplied times the annual operating hours (8,760 hours/yr) and dividing by 2000 lbs/ton equal 0.03 ton/yr.

b. Emission Limitation:

Visible PE from the exhaust stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A. Method 9 and the procedures are specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

6. P004, Shot blasters

Operations, Property and/or Equipment Description:

Coyote shotblaster, Panborn shotblaster, and 2 Wheelabrator shotblasters vented to baghouse

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E) (to avoid BAT applicability)	Particulate emissions (PE) shall not exceed 0.3 ton/yr. See (2)a, below.
b.	OAC rule 3745-17-07(A)(1)(b)	Visible PE from the exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-11 (A)(2)	See (2)b, below.

(2) Additional Terms and Conditions

a. Permit to Install 01-12252 for this air contaminant source takes into account the use of a baghouse system, whenever this air contaminant source is in operation, with a minimum 100% capture efficiency with venting to a baghouse that achieves 99% control efficiency, by weight for PE, as a voluntary restriction. The permittee proposed this restriction for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05.

b. The operation of the dust collector is integral to the operation of the shot blast. Therefore, this emissions unit is operating in compliance with this rule as long as the permittee maintains compliance with the terms and conditions of this permit.

c) Operational Restrictions

(1) The pressure drop across the baghouse controlling emissions from emissions unit shall be maintained within the range of 2 to 4 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on weekly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) 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.

a. Emissions Limitation:

PE shall not exceed 0.18 ton/yr.

Applicable Compliance Method

The permittee may demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(0.69 pounds PM /1,000 lbs SCC 3-09-002-04) x 6,000 lbs/hr x (1 - 0.99) = 0.01 lbs PE/hr multiplied times the annual operating hours (8,760 hours/yr) and dividing by 2000 lbs/ton equal 0.18 ton/yr.

b. Emissions Limitation:

Visible PE from the exhaust stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A. Method 9 and the procedures are specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.