



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

6/13/2011

Certified Mail

Mr. Troy Kajfasz
Materion Brush Inc.
14710 W. Portage River South Road
Elmore, OH 43416-9502

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0362000009
Permit Number: P0108064
Permit Type: Initial Installation
County: Ottawa

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, News Herald. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

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

Cc: U.S. EPA Region 5 -Via E-Mail Notification
Ohio EPA-NWDO; Michigan; Canada



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description: MaterionBrush is applying for a permit to install (PTI) for a master alloy furnace rebuild area (P130) and a master alloy furnace bay/rebuild area vacuum system (P131), under PTI #P0108064, located at their beryllium/beryllium alloy production facility in Elmore, Ohio (Ottawa County). The master alloy furnace rebuild area is where spent master alloy electric arc furnaces are torn down and then reassembled using new carbon parts and refractory cements. The master alloy furnace bay/furnace rebuild vacuum system will be used to remove materials during spent furnace teardown and rebuild in the new master alloy furnace rebuild area. Both emissions units are controlled by a common baghouse (C-1-1-6).

The master alloy furnace bay vacuum drops associated with emissions unit P131 employ a primary cyclone (C-1-1-16), secondary cyclone (C-1-1-15), cartridge collector (C-1-1-14), and HEPA filter (C-1-1-13), in series, prior to baghouse C-1-1-6. The master alloy furnace rebuild vacuum drops associated with emissions unit P131 employ a primary cyclone (C-1-1-17), cartridge collector (C-1-1-14), and HEPA filter (C-1-1-13), in series, prior to baghouse C-1-1-6.

The Alloy R & D Laboratory (emissions unit P007), which is permitted under PTI #P0106916, is also controlled by the same common baghouse (C-1-1-6). Therefore a combined emissions limit has been established for particulate and beryllium emissions from all three emissions units. The PTI for P007 is an administrative modification of PTI #P0106916 to establish a new emissions limit (a combined limit for all three emissions units).

3. Facility Emissions and Attainment Status: MaterionBrush is a major facility for Prevention of Significant Deterioration (PSD) and Title V purposes. MaterionBrush is an area source with respect to hazardous air pollutant (HAP) emissions, including beryllium, and complies with the beryllium NESHAP [40 CFR 61.32(b)]. Ottawa County is in attainment for all criteria pollutants.
4. Source Emissions: MaterionBrush is requesting an to establish federally enforceable limitations for particulate matter equal to or less than 10 microns in size (PM10) to avoid PSD permitting requirements. The federally enforceable limitation will be based on an operational restriction to use a baghouse capable of achieving a maximum outlet concentration of 0.005 grains/dscf of PM10. The federally enforceable restriction which limits PM10 emissions also limits Be emissions.
5. Conclusion: With the federally enforceable limitations established in this permit for PM10 and Be emissions from the alloy R & D lab (P007), master alloy scrap furnace rebuild area (P130) and the master alloy furnace bay/rebuild area vacuum system (P131), the company will not trigger the significance levels for PSD permitting.

6. Please provide additional notes or comments as necessary:

None.

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
PM10	5.65
Be	0.04

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
Materion Brush Inc.

Issue Date: 6/13/2011

Permit Number: P0108064

Permit Type: Initial Installation

Permit Description: This Permit to Install (PTI) is for the installation of a master alloy furnace rebuild area (P130) and master alloy furnace bay/rebuild area vacuum system (P131) at the Materion Brush Inc. Elmore, Ohio facility. The alloy R & D laboratory (P007) is controlled by a common baghouse (C-1-1-6), and therefore is included in the permit as an administrative modification to PTI #P0106916, in order to establish a combined emissions limit with P130 and P131 for PM10 and beryllium.

Facility ID: 0362000009

Facility Location: Materion Brush Inc.

14710 W. Portage River South Road, 1/4 mile east of SR 590

Harris, OH 43416-9502

Facility Description: Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum)

The Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Andrea Moore at Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402 or (419)352-8461. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc



DRAFT

**Division of Air Pollution Control
Permit-to-Install
for
Materion Brush Inc.**

Facility ID:	0362000009
Permit Number:	P0108064
Permit Type:	Initial Installation
Issued:	6/13/2011
Effective:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install
for
Materion Brush Inc.

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Authorization

Facility ID: 0362000009

Facility Description: Copper Rolling and Drawing

Application Number(s): A0041814, A0041988

Permit Number: P0108064

Permit Description: This Permit to Install (PTI) is for the installation of a master alloy furnace rebuild area (P130) and master alloy furnace bay/rebuild area vacuum system (P131) at the Materion Brush Inc. Elmore, Ohio facility. The alloy R & D laboratory (P007) is controlled by a common baghouse (C-1-1-6), and therefore is included in the permit as an administrative modification to PTI #P0106916, in order to establish a combined emissions limit with P130 and P131 for PM10 and beryllium.

Permit Type: Initial Installation

Permit Fee: \$400.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 6/13/2011

Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Materion Brush Inc.
14710 W. Portage River South Road
1/4 mile east of SR 590
Harris, OH 43416-9502

of a Permit-to-Install 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, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director



Authorization (continued)

Permit Number: P0108064

Permit Description: This Permit to Install (PTI) is for the installation of a master alloy furnace rebuild area (P130) and master alloy furnace bay/rebuild area vacuum system (P131) at the Materion Brush Inc. Elmore, Ohio facility. The alloy R & D laboratory (P007) is controlled by a common baghouse (C-1-1-6), and therefore is included in the permit as an administrative modification to PTI #P0106916, in order to establish a combined emissions limit with P130 and P131 for PM10 and beryllium.

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

Group Name: alloy R&D/master alloy rebuild

Table with 2 columns: Emissions Unit ID and details. Rows include P007 (Alloy Met Lab), P130 (Master Alloy Furnace Rebuild Area), and P131 (Master Alloy Furnace Bay/Rebuild Area Vacuum System).

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) 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.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

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- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

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- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.
- 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 state-only required 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 Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permitteeshall

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submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, 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.)

10. 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).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All

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records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

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 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).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

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16. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions

Effective Date: To be entered upon final issuance

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The ambient concentration of Be in the vicinity of the facility shall not exceed 0.01 micrograms (ug)/cubic meter, averaged over a 30-day period, as specified in the National Emissions Standard for Hazardous Air Pollutants, 40 CFR 61.32 (b). The permittee shall properly operate and maintain control equipment and implement control measures for all Be emitting emissions units at the facility.

C. Emissions Unit Terms and Conditions

Effective Date: To be entered upon final issuance

1. Emissions Unit Group -alloy r&d/master alloy rebuild: P007, P130, and P131

EU ID	Operations, Property and/or Equipment Description
P007	Alloy R & D Lab (administrative modification to PTI #P0106916, issued 11/17/2010)
P130	Master Alloy Furnace Rebuild Area (initial install - formerly TMP167669)
P131	Master Alloy Furnace Bay/Rebuild Area Vacuum System (initial install - TMP167670)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	<p><u>The following limitations apply to emission units P007, P130, and P131 combined [see b)(2)d.]:</u></p> <p>Combined emissions of particulate matter equal to or less than 10 microns in size (PM10) shall not exceed 1.29 lb/hr and 5.65 ton/yr.</p> <p>Combined emissions of beryllium (Be) shall not exceed 0.01 lb/hr and 0.04 ton/yr.</p> <p>Visible particulate emissions (PE) shall not exceed 5% opacity, as a six-minute average.</p> <p>See b)(2)a. and c)(1)</p>
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
	OAC rule 3745-31-05(A)(3)(a), as effective 12/01/06	See b)(2)c.
	OAC rule 3745-17-11(B)	See b)(2)d.
	OAC rule 3745-17-07(A)	See b)(2)e.
	40 CFR 61.32(b)	See Term 2 of Section B – FACILITY WIDE TERMS AND CONDITIONS

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(2) Additional Terms and Conditions

- a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting the potentials to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) which require control equipment:

- i. 1.29 lb PM₁₀/hr and 5.65 ton/yr;
- ii. 0.01 lb Be/hr and 0.04 ton/yr; and
- iii. Visible particulate emissions shall not exceed 5% opacity, as a six-minute average.

All emissions of particulate matter from the baghouse stack are PM₁₀ and include Be.

The combined emissions limitations include emissions from P007, P130, and P131, which are particulate and beryllium sources controlled by a common baghouse (C-1-1-6). Additional control devices are also employed for emissions from P131 prior to baghouse C-1-1-6, in accordance with c)(1)b. and c)(1)c.

- b. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D); therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the PM₁₀ emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

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- d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D). This determination is based on all emissions of particulate matter being PM10 and the established PM10 limitation being more restrictive than the particulate emissions limitation established by OAC rule 3745-17-11(B). Particulate emissions (PE) measured using Method 5 of 40 CFR Part 60, Appendix A would be equivalent to the filterable particulates measured using Method 201/201A of 40 CFR, Part 51, Appendix M. A PM10 limitation is more stringent due to the inclusion of condensable particulate matter measured by Method 202 of 40 CFR, Part 51, Appendix M.
 - e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
- c) Operational Restrictions
- (1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a.]:
 - a. These emissions units (P007, P130, and P131) shall be vented to a common baghouse (C-1-1-6) capable of achieving a maximum outlet concentration of 0.005 grains/dscf of PM10;
 - b. The master alloy furnace bay vacuum drops associated with emissions unit P131 shall employ a primary cyclone (C-1-1-16), secondary cyclone (C-1-1-15), cartridge collector (C-1-1-14), and HEPA filter (C-1-1-13), in series, prior to baghouse C-1-1-6; and
 - c. The master alloy furnace rebuild vacuum drops associated with emissions unit P131 shall employ a primary cyclone (C-1-1-17), cartridge collector (C-1-1-14), and HEPA filter (C-1-1-13), in series, prior to baghouse C-1-1-6.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall document all times the control devices serving these emissions units were not employed when the emissions units were in operation.
 - (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the common baghouse (C-1-1-6) during the operation of any one two or all three of these emissions units, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

In addition, the permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the following Master Alloy Furnace Bay/Rebuild Area Vacuum System control devices, during the operation of emissions unit P131, including periods of startup and shutdown:

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- a. primary cyclone (C-1-1-17);
- b. primary cyclone (C-1-1-16);
- c. secondary cyclone (C-1-1-15);
- d. cartridge collector (C-1-1-14); and
- e. HEPA filter (C-1-1-13).

The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and 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 below, 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: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (3) Except for an initial operating period after filter media replacement to attain design filtering efficiency, the acceptable range for the pressure drop across the common baghouse (C-1-1-6) is 0.2 to 10 inches of water.

Except for an initial operating period after filter media replacement to attain design filtering efficiency, the acceptable range for the pressure drop across the Master Alloy Furnace Bay/Rebuild Area Vacuum System control devices is as follows:

- a. primary cyclone (C-1-1-17) – 0.1 to 10 inches of water;
- b. primary cyclone (C-1-1-16) – 0.1 to 10 inches of water;
- c. secondary cyclone (C-1-1-15) – 0.1 to 10 inches of water;
- d. cartridge collector (C-1-1-14) – 0.1 to 10 inches of water;
- e. HEPA filter (C-1-1-13) – 0.1 to 4 inches of water.

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This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the NWDO. The permittee may request revisions to the pressure drop range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the pressure drop range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. each period of time when the pressure drop across the common baghouse (C-1-1-6) was outside of the acceptable range during the operation of any one, any two, or all three emissions units (P007, P130, and/or P131);
 - b. each period of time when the pressure drop across the primary cyclone (C-1-1-17), primary cyclone (C-1-1-16), secondary cyclone (C-1-1-15), cartridge collector (C-1-1-14), and/or the HEPA filter (C-1-1-13) was outside of the acceptable range during the operation of emissions unit P131;
 - c. an identification of each incident of deviation described in e)(1)a. and/or e)(1)b. where a prompt investigation was not conducted;
 - d. an identification of each incident of deviation described in e)(1)a. and/or e)(1)b. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. an identification of each incident of deviation described in e)(1)a. and/or e)(1)b. where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emissions testing shall be conducted within 180 days after initial startup of these emissions units. All three sources (P007, P130, and P131) and all control devices listed in c)(1)a., c)(1)b., and c)(1)c. must be operating during the test.
 - b. The emission testing shall be conducted to demonstrate compliance with the following limits:

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- i. the combined mass emission limitations of 0.01 lb Be/hr and 0.005 gr/dscf for PM10.
- c. The following test methods shall be employed to demonstrate compliance with the above emission limitations and verify emission factors:
 - i. Methods 1 - 4 of 40 CFR Part 60, Appendix A;
 - ii. for Be - Method 29 or 104 of 40 CFR Part 60, Appendix A;
 - iii. for PM10 - Method 201/201A and 202 of 40 CFR Part 51, Appendix M.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

- d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's air agency's refusal to accept the results of the emissions tests.
 - f. Personnel from the Ohio EPA District Office's air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Division of Air Pollution Control within 30 days following completion of the tests.
- (2) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitations:
0.005 gr PM10/dscf

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Applicable Compliance Method:

Compliance with the outlet grain loading emission limitation shall be demonstrated based on the results of the emissions testing conducted in accordance with the requirements as outlined in f)(1) above.

b. Emission Limitations:

1.29 lb PM10/hr and 5.65 tons PM10/yr (for P007, P130, and P131, combined)

Applicable Compliance Method:

The hourly limitation was established by multiplying the maximum baghouse outlet concentration of 0.005 gr/dscf, the maximum volumetric air flow rate (30,000 acfm), and using the following conversion factors in order to convert to pounds per hour 1 lb/7000 grains, 1 dscf/1acfm, 60 minutes/hour. If required, the permittee shall demonstrate compliance with the hourly PM10 limitation by testing in accordance with Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M. The three sources (P007, P130, and P131) must be operating during the test. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The ton/year limitation was established by multiplying the pounds per hour limitation by 8760 hours per year, and applying a conversion factor of 1 ton/2000 lbs. Therefore, provided compliance is shown with the hourly emissions limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitations:

0.01 lbBe/hr and 0.04 ton Be/yr (for P007, P130, and P131, combined)

Applicable Compliance Method:

Compliance with the lb/hr emissions limitation shall be demonstrated based on the results of emissions testing conducted in accordance with the requirements as outlined in f)(1) above.

The ton/year limitation was established by multiplying the pounds per hour limitation by 8760 hours per year, and applying a conversion factor of 1 ton/2000 lbs. Therefore, provided compliance is shown with the hourly emissions limitation, compliance with the annual limitation shall also be demonstrated.

d. Emission Limitations:

Visible PE shall not exceed 5% opacity, as a six-minute average from the stack serving these emission units.

Applicable Compliance Method:

If required, compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

g) Miscellaneous Requirements

- (1) This PTI supercedes the requirements of PTI #P0106916 issued on 11/17/2010 for emissions unit P007.