



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

12/30/02

**CERTIFIED MAIL**

**RE: Final Title V Administrative Permit Amendment Chapter 3745-77 permit**

06-79-03-0152  
IMCO Recycling of Ohio Inc.  
Mike Peebles Mr.  
P.O. Box 151  
7335 Newport Road, SE  
Urichsville, OH 44683

Dear Mike Peebles:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street  
Room 300  
Columbus, Ohio 43215

If you have any questions, please contact Southeast District Office.

Very truly yours,

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

cc: Southeast District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

**FINAL TITLE V ADMINISTRATIVE PERMIT AMENDMENT**

Effective Date: **12/11/02**

Expiration Date: **12/11/07**

Modification Issue Date: **12/30/02**

This document constitutes issuance of a Title V permit for Facility ID: 06-79-03-0152 to:  
IMCO Recycling of Ohio Inc.  
P.O. Box 151  
7335 Newport Road, SE  
Urichsville, OH 44683

**Emissions Unit ID (Company ID)/Emissions Unit Activity Description**

F001 (shredder ) Processing aluminum scrap prior to furnace charge	aluminum	siding, ube's
F002 (shredder ) Processing aluminum scrap prior to furnace charge	P905 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum	P910 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum
P901 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum	P906 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum	P911 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum
P902 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum	P907 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum	P912 (reveratory furnace) Melting of aluminum scrap to produce molten aluminum, remelt scrap ingot
P903 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum	P908 (rotary furnace) Processing aluminum scrap and dross to yield molten aluminum	P913 (reveratory furnace) Melting of aluminum scrap to produce molten aluminum, remelt scrap ingot
P904 (rotary furnace) Processing aluminum scrap and dross to yield molten	P909 (delacquar unit) Removing Paint (delacquaring) from scrap aluminum	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740) 385-8501

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

#### 1. **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:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- 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 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.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*
- 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:
  - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*
  - ii. 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 record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from

malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. 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.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

- iv. 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.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

## 2. **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 condition, of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upset conditions.

Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))*

## 3. **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.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

## 4. **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.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

**5. Severability Clause**

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.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

**6. 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 reissuance, or modification, or for denial of a permit renewal application.
- 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, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. 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, reopening 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.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. 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.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

**8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

**9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

**10. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

**11. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

*(Authority for term: OAC rule 3745-77-07(B))*

**12. Compliance Requirements**

**Facility Name: IMCO Recycling of Ohio Inc.**  
**Facility ID: 0679030152**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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.
- b. 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:
  - i. 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.
  - ii. 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 paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. 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.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency 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:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. 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.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.

- (c) Whether compliance was continuous or intermittent.
  - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
  - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.  
*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

**13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.  
*(Authority for term: OAC rule 3745-77-07(F))*

**14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).  
*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

**15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.  
*(Authority for term: OAC rule 3745-77-07(G))*

**16. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

*(Authority for term: OAC rule 3745-77-07(I))*

**17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

**18. Insignificant Activities**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**Facility Name: IMCO Recycling of Ohio Inc.**  
**Facility ID: 0679030152**

**19. Permit to Install Requirement**

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**20. 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.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**B. *State Only Enforceable Section***

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**2. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

**3. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**4. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air

**Facility Name: IMCO Recycling of Ohio Inc.**  
**Facility ID: 0679030152**

agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**5. Permit Transfers**

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

**6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## Part II - Specific Facility Terms and Conditions

**A. State and Federally Enforceable Section**

None

**B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

F003 - dross handling;

F004 - pouring;

F005 - salt cake crushing;

F006 - roadways and parking areas;

T001 - ammonia tank;

G001 - gasoline dispensing facility; and

Z001 - five 2.5 MMBtu/hr heaters and five 0.75 MMBtu/hr burners.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Facility Name: IMCO Recycling of Ohio Inc.  
 Facility ID: 0679030152  
 Emissions Unit: shredder (F001)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** shredder (F001)

**Activity Description:** Processing aluminum scrap prior to furnace charge

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Scrap Processing Line #1, including an aluminum scrap shredder, vented to a fabric filter.	OAC rule 3745-31-05(A)(3) (PTI 06-3362 as modified 4/8/92)  40 CFR 63.1505(b)(1)	Particulate emissions (stack only) shall not exceed 0.35 lb/hr and 1.53 tpy.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	[40 CFR 63.1505(b)(1)] The permittee shall not discharge emissions in excess of 0.010 grain of PM per dry standard cubic foot.
	OAC rule 3745-17-11(B)(2)	See section A.I.2.a.  Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** shredder (F001)

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

**II Operational Restrictions**

- 1. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

- 2. [40 CFR 63.1506(e)]

The owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system and must:

- 2a. [40 CFR 63.1506(e)(1)(i)]

Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan; and

**Facility Name: IMCO Recycling of Ohio Inc.**

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- 2b. [40 CFR 63.1506(e)(1)(ii)]  
Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
3. [40 CFR 63.1506(p)]  
When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]  
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]  
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:
- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
  - b. A monitoring schedule for each affected source and emissions unit.

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- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
  - d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
    - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
    - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
  - e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
- i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.
3. [40 CFR 63.1510(d)]  
The owner or operator must:
- a. Install, operate, and maintain a capture/collection system for each affected source and emissions unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in section A.II.1 [40 CFR 63.1506(c)] and record the results of each inspection.

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4. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
4. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as

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detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

5. [40 CFR 63.1510(i)(1) and (2)]
- a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:
    - i. Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or
    - ii. Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the owner or operator must promptly initiate and complete corrective action, or
    - iii. Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the owner or operator must promptly initiate and complete corrective action.
  - b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.
6. [40 CFR 63.1517(a)]
- As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.
- a. The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
  - b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
  - c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

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7. [40 CFR 63.1517(b)]  
In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:
- a. For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter using a bag leak detection system: the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
7. b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:
- i. Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
  - ii. If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.
  - iii. If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).
7. c. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- d. Records of annual inspections of emission capture/collection and closed vent systems.
- e. Records for any approved alternative monitoring or test procedure.
- f. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

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- i. Startup, shutdown, and malfunction plan;
- ii. For major sources, OM&M plan; and
- iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

**IV Reporting Requirements**

- 1. [40 CFR 63.1515(a)]
  - a. The owner or operator must submit initial notifications to the applicable permitting authority as follows:
    - i. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.
    - ii. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

**IV Reporting Requirements**

- 1. [40 CFR 63.1515(b)]
  - b. Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy.

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Facility ID: 0679030152  
Emissions Unit: shredder (F001)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

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**Facility ID:** 0679030152  
**Emissions Unit:** shredder (F002)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** shredder (F002)

**Activity Description:** Processing aluminum scrap prior to furnace charge

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Scrap Processing Line #2, including an aluminum scrap shredder, vented to a fabric filter.	OAC rule 3745-31-05(A)(3) (PTI 06-3362 as modified 4/8/92)	Particulate emissions (stack only) shall not exceed 0.35 lb/hr and 1.53 tpy.
	40 CFR 63.1505(b)(1)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	[40 CFR 63.1505(b)(1)] The permittee shall not discharge emissions in excess of 0.010 grain of PM per dry standard cubic foot.
	OAC rule 3745-17-11(B)(2)	See section A.I.2.a.  Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.

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The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

**II Operational Restrictions**

- 1. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

- 2. [40 CFR 63.1506(e)]

The owner or operator of a scrap shredder with emissions controlled by a fabric filter must operate a bag leak detection system and must:

- 2a. [40 CFR 63.1506(e)(1)(i)]

Initiate corrective action within 1-hour of a bag leak detection system alarm and complete the corrective action procedures in accordance with the OM&M plan; and

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- 2b. [40 CFR 63.1506(e)(1)(ii)]  
Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
  
3. [40 CFR 63.1506(p)]  
When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]  
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
  
2. [40 CFR 63.1510(b)]  
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:
  - a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
  
  - b. A monitoring schedule for each affected source and emissions unit.

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- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
  - d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
    - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
    - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
  - e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
- i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.
3. [40 CFR 63.1510(d)]  
The owner or operator must:
- a. Install, operate, and maintain a capture/collection system for each affected source and emissions unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in section A.II.1 [40 CFR 63.1506(c)] and record the results of each inspection.

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4. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
4. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as

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detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

5. [40 CFR 63.1510(i)(1) and (2)]
- a. The owner or operator of a continuous lime injection system must verify that lime is always free-flowing by either:
    - i. Inspecting each feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If lime is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period; or
    - ii. Subject to the approval of the permitting agency, installing, operating and maintaining a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system or other system to confirm that lime is free-flowing. If lime is found not to be free-flowing, the owner or operator must promptly initiate and complete corrective action, or
    - iii. Subject to the approval of the permitting agency, installing, operating and maintaining a device to monitor the concentration of HCl at the outlet of the fabric filter. If an increase in the concentration of HCl indicates that the lime is not free-flowing, the owner or operator must promptly initiate and complete corrective action.
  - b. The owner or operator of a continuous lime injection system must record the lime feeder setting once each day of operation.
6. [40 CFR 63.1517(a)]
- As required by 40 CFR 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.
- a. The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
  - b. The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
  - c. The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

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**Emissions Unit: shredder (F002)**

7. [40 CFR 63.1517(b)]

In addition to the general records required by 40 CFR 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:

- a. For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter using a bag leak detection system: the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
- 7. b. For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:
  - i. Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;
  - ii. If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken.
  - iii. If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in 40 CFR 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge).
- 7. c. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- d. Records of annual inspections of emission capture/collection and closed vent systems.
- e. Records for any approved alternative monitoring or test procedure.
- f. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

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**Emissions Unit:** shredder (F002)

- i. Startup, shutdown, and malfunction plan;
- ii. For major sources, OM&M plan; and
- iii. Site-specific secondary aluminum processing unit emission plan (if applicable).

#### **IV Reporting Requirements**

1. [40 CFR 63.1515(a)]
  - a. The owner or operator must submit initial notifications to the applicable permitting authority as follows:
    - i. As required by 40 CFR 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.
    - ii. As required by 40 CFR 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

#### **IV Reporting Requirements**

1. [40 CFR 63.1515(b)]
  - b. Each owner or operator must submit a notification of compliance status report within 60 days after the compliance dates specified in 40 CFR 63.1501. The notification must be signed by the responsible official who must certify its accuracy.

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**Facility ID:** 0679030152  
**Emissions Unit:** shredder (F002)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

Facility Name: IMCO Recycling of Ohio Inc.  
 Facility ID: 0679030152  
 Emissions Unit: rotary furnace (P901)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P901)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #1 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	<p>Particulate emissions (stack only) shall not exceed 6.57 tpy.</p> <p>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.</p> <p>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.</p> <p>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.</p> <p>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.</p> <p>The permittee shall not discharge emissions in excess of:</p>
	40 CFR 63.1505(i) (Subpart RRR)	

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OAC rule 3745-18-06(E)(2)	<p>PM: 0.40 lb per ton of feed/charge;</p> <p>Dioxins and furans toxicity equivalent (D/F TEQ): <math>2.1 \times 10^{-4}</math> grain per ton of feed/charge; and</p> <p>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.</p> <p>See section A.I.2.a.</p> <p>Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 72.7 lbs/hr.</p>
OAC rule 3745-17-07	<p>See section A.I.2.b.</p> <p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-11	<p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-21-08(B)	<p>See section A.I.2.c.</p>
OAC rule 3745-23-06(B)	<p>See section A.I.2.c.</p>

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

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Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

### **1. [40 CFR 63.1506(b)]**

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

### **2. [40 CFR 63.1506(c)]**

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

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- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.
  
3. [40 CFR 63.1506(d)]  
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:
  - a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
  - b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
  - c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
    - i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
    - ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.
  
4. [40 CFR 63.1506(m)]  
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:
  - a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
    - i. Initiate corrective action within 1 hour of a bag leak detection system alarm.
    - ii. Complete the corrective action procedures in accordance with the OM&M plan.
    - iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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4.
  - b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
  - c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
  - d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
  - e. Operate each sidewell furnace such that:
    - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.
    - ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.
5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

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approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

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3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

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- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

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7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

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**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

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**Emissions Unit:** rotary furnace (P902)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P902)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #2 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	Particulate emissions (stack only) shall not exceed 6.57 tpy.  Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.  Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.  Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.  Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.  The permittee shall not discharge emissions in excess of:
	40 CFR 63.1505(i) (Subpart RRR)	

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<p>OAC rule 3745-18-06(E)(2)</p>	<p>PM: 0.40 lb per ton of feed/charge;</p> <p>Dioxins and furans toxicity equivalent (D/F TEQ): <math>2.1 \times 10^{-4}</math> grain per ton of feed/charge; and</p> <p>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.</p> <p>See section A.I.2.a.</p> <p>Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 72.7 lbs/hr.</p>
<p>OAC rule 3745-17-07</p>	<p>See section A.I.2.b.</p> <p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-17-11</p>	<p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-21-08(B)</p>	<p>See section A.I.2.c.</p>
<p>OAC rule 3745-23-06(B)</p>	<p>See section A.I.2.c.</p>

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

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Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

2. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

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- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.
3. [40 CFR 63.1506(d)]  
The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:
- a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
  - b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
  - c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
    - i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
    - ii. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.
4. [40 CFR 63.1506(m)]  
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:
- a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
    - i. Initiate corrective action within 1 hour of a bag leak detection system alarm.
    - ii. Complete the corrective action procedures in accordance with the OM&M plan.
    - iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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4.
  - b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
  - c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
  - d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
  - e. Operate each sidewell furnace such that:
    - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.
    - ii. Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.
5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

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approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

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**Emissions Unit: rotary furnace (P902)**

3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P902)**

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P902)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  
- i. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P902)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

Facility Name: IMCO Recycling of Ohio Inc.

Facility ID: 0679030152

Emissions Unit: rotary furnace (P903)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P903)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #3 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	<p>Particulate emissions (stack only) shall not exceed 6.57 tpy.</p> <p>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.</p> <p>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.</p> <p>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.</p> <p>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.</p> <p>The permittee shall not discharge emissions in excess of:</p>
	40 CFR 63.1505(i) (Subpart RRR)	

**Facility Name:** IMCO Recycling of Ohio Inc.

**Facility ID:** 0679030152

**Emissions Unit:** rotary furnace (P903)

	PM: 0.40 lb per ton of feed/charge;
	Dioxins and furans toxicity equivalent (D/F TEQ): $2.1 \times 10^{-4}$ grain per ton of feed/charge; and
	HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.
	See section A.I.2.a.
OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO <sub>2</sub> ) shall not exceed 72.7 lbs/hr.
	See section A.I.2.b.
OAC rule 3745-17-07	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-08(B)	See section A.I.2.c.
OAC rule 3745-23-06(B)	See section A.I.2.c.

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P903)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

2. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P903)**

c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P903)**

4. b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
- c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- e. Operate each sidewell furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P903)**

approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P903)**

3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P903)**

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P903)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

Facility Name: IMCO Recycling of Ohio Inc.

Facility ID: 0679030152

Emissions Unit: rotary furnace (P903)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

- 2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P904)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P904)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #4 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	Particulate emissions (stack only) shall not exceed 6.57 tpy.  Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.  Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.  Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.  Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.  The permittee shall not discharge emissions in excess of:
	40 CFR 63.1505(i) (Subpart RRR)	

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P904)

<p>OAC rule 3745-18-06(E)(2)</p>	<p>PM: 0.40 lb per ton of feed/charge;</p> <p>Dioxins and furans toxicity equivalent (D/F TEQ): <math>2.1 \times 10^{-4}</math> grain per ton of feed/charge; and</p> <p>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.</p> <p>See section A.I.2.a.</p> <p>Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 72.7 lbs/hr.</p>
<p>OAC rule 3745-17-07</p>	<p>See section A.I.2.b.</p> <p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-17-11</p>	<p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-21-08(B)</p>	<p>See section A.I.2.c.</p>
<p>OAC rule 3745-23-06(B)</p>	<p>See section A.I.2.c.</p>

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P904)**

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

### **1. [40 CFR 63.1506(b)]**

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

### **2. [40 CFR 63.1506(c)]**

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P904)**

c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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**Emissions Unit: rotary furnace (P904)**

4. b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
- c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- e. Operate each sidewell furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

**Facility Name: IMCO Recycling of Ohio Inc.**

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**Emissions Unit: rotary furnace (P904)**

approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

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**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P904)**

3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P904)

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P904)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

Facility Name: IMCO Recycling of Ohio Inc.  
Facility ID: 0679030152  
Emissions Unit: rotary furnace (P904)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

- II Operational Restrictions**  
None

- III Monitoring and/or Recordkeeping**  
None

- IV Reporting Requirements**  
None

- V Testing Requirements**  
None

- VI Miscellaneous Requirements**  
None

Facility Name: IMCO Recycling of Ohio Inc.  
 Facility ID: 0679030152  
 Emissions Unit: rotary furnace (P905)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P905)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #5 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	<p>Particulate emissions (stack only) shall not exceed 6.57 tpy.</p> <p>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.</p> <p>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.</p> <p>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.</p> <p>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.</p> <p>The permittee shall not discharge emissions in excess of:</p>
	40 CFR 63.1505(i) (Subpart RRR)	

Facility Name: IMCO Recycling of Ohio Inc.

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Emissions Unit: rotary furnace (P905)

	PM: 0.40 lb per ton of feed/charge;
	Dioxins and furans toxicity equivalent (D/F TEQ): $2.1 \times 10^{-4}$ grain per ton of feed/charge; and
	HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.
	See section A.I.2.a.
OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO <sub>2</sub> ) shall not exceed 72.7 lbs/hr.
	See section A.I.2.b.
OAC rule 3745-17-07	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-08(B)	See section A.I.2.c.
OAC rule 3745-23-06(B)	See section A.I.2.c.

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

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**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P905)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

### **1. [40 CFR 63.1506(b)]**

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

### **2. [40 CFR 63.1506(c)]**

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

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**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P905)**

c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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**Emissions Unit: rotary furnace (P905)**

4. b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
- c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- e. Operate each sidewell furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P905)**

approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P905)**

3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P905)**

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P905)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

Facility Name: IMCO Recycling of Ohio Inc.  
Facility ID: 0679030152  
Emissions Unit: rotary furnace (P905)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P906)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P906)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #6 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	Particulate emissions (stack only) shall not exceed 6.57 tpy.  Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.  Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.  Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.  Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.  The permittee shall not discharge emissions in excess of:
	40 CFR 63.1505(i) (Subpart RRR)	

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<p>OAC rule 3745-18-06(E)(2)</p>	<p>PM: 0.40 lb per ton of feed/charge;</p> <p>Dioxins and furans toxicity equivalent (D/F TEQ): <math>2.1 \times 10^{-4}</math> grain per ton of feed/charge; and</p> <p>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.</p> <p>See section A.I.2.a.</p> <p>Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 72.7 lbs/hr.</p>
<p>OAC rule 3745-17-07</p>	<p>See section A.I.2.b.</p> <p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-17-11</p>	<p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-21-08(B)</p>	<p>See section A.I.2.c.</p>
<p>OAC rule 3745-23-06(B)</p>	<p>See section A.I.2.c.</p>

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

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**Emissions Unit: rotary furnace (P906)**

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

2. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

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**Emissions Unit: rotary furnace (P906)**

c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

c. The owner or operator may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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4. b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
- c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- e. Operate each sidewall furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewall unless the hearth also is equipped with an add-on control device.

5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

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**Emissions Unit: rotary furnace (P906)**

approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

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**Emissions Unit: rotary furnace (P906)**

3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

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**Emissions Unit:** rotary furnace (P906)

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6.
  - e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
  - f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
  - g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
  - h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

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**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P906)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

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**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P906)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

Facility Name: IMCO Recycling of Ohio Inc.  
 Facility ID: 0679030152  
 Emissions Unit: rotary furnace (P907)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P907)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #7 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	<p>Particulate emissions (stack only) shall not exceed 6.57 tpy.</p> <p>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.</p> <p>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.</p> <p>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.</p> <p>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.</p> <p>The permittee shall not discharge emissions in excess of:</p>
	40 CFR 63.1505(i) (Subpart RRR)	

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**Emissions Unit:** rotary furnace (P907)

<p>OAC rule 3745-18-06(E)(2)</p>	<p>PM: 0.40 lb per ton of feed/charge;</p> <p>Dioxins and furans toxicity equivalent (D/F TEQ): <math>2.1 \times 10^{-4}</math> grain per ton of feed/charge; and</p> <p>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.</p> <p>See section A.I.2.a.</p> <p>Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 72.7 lbs/hr.</p>
<p>OAC rule 3745-17-07</p>	<p>See section A.I.2.b.</p> <p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-17-11</p>	<p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-21-08(B)</p>	<p>See section A.I.2.c.</p>
<p>OAC rule 3745-23-06(B)</p>	<p>See section A.I.2.c.</p>

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

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**Emissions Unit:** rotary furnace (P907)

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

2. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

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c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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4. b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
- c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- e. Operate each sidewell furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

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**Emissions Unit: rotary furnace (P907)**

approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

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**Emissions Unit: rotary furnace (P907)**

3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P907)**

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P907)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

Facility Name: IMCO Recycling of Ohio Inc.  
Facility ID: 0679030152  
Emissions Unit: rotary furnace (P907)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P908)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P908)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #8 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	Particulate emissions (stack only) shall not exceed 6.57 tpy.  Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.  Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.  Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.  Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.  The permittee shall not discharge emissions in excess of:
	40 CFR 63.1505(i) (Subpart RRR)	

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P908)

	PM: 0.40 lb per ton of feed/charge;  Dioxins and furans toxicity equivalent (D/F TEQ): $2.1 \times 10^{-4}$ grain per ton of feed/charge; and  HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.  See section A.I.2.a.
OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO <sub>2</sub> ) shall not exceed 72.7 lbs/hr.  See section A.I.2.b.
OAC rule 3745-17-07	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-08(B)	See section A.I.2.c.
OAC rule 3745-23-06(B)	See section A.I.2.c.

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P908)**

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

### **1. [40 CFR 63.1506(b)]**

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

### **2. [40 CFR 63.1506(c)]**

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

### **3. [40 CFR 63.1506(d)]**

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P908)**

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

- a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
- b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
- c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
  - i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

- a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
  - i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

- iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

4. b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P908)**

- c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- e. Operate each sidewell furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

- 5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

- 1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
- 2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P908)**

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.
3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to

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**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P908)**

confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]

The owner or operator must:

- a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
- b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

- a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
- b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P908)**

- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
  - c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
  - d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
  - 6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
  - f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
  - g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
  - h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
7. [40 CFR 63.1510(h)]

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: rotary furnace (P908)**

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

Facility Name: IMCO Recycling of Ohio Inc.  
Facility ID: 0679030152  
Emissions Unit: rotary furnace (P908)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** delaquer unit (P909)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** delaquer unit (P909)

**Activity Description:** Removing Paint (delacquering) from scrap aluminum siding, ubc's

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Delacquer unit - existing delacquering furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-3362 as modified 4/8/92)          40 CFR 63.1505(d)	Particulate emissions (stack only) shall not exceed 1.69 lbs/hr and 7.4 tpy.  Emissions of nitrogen oxides (NOx) shall not exceed 0.69 lb/hr and 3.02 tpy.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.  [40 CFR 63.1505(d)(1)] The permittee shall not discharge emissions in excess of:  0.06 pound of THC, as propane, per ton of feed/charge  0.08 pound of PM per ton of feed/charge;  Dioxins and furans toxicity equivalent (D/F TEQ): 3.5 x 10 <sup>-6</sup> grain per ton of feed/charge;

Facility Name: IMCO Recycling of Ohio Inc.  
Facility ID: 0679030152  
Emissions Unit: delaquer unit (P909)

OAC rule 3745-17-07(A)	0.80 pound of HCl per ton of feed/charge. See section A.I.2.a.
OAC rule 3745-18-06(E)(2)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six-minute average, at any time.
OAC rule 3745-17-11(B)(2)	Emissions of sulfur dioxide (SO <sub>2</sub> ) shall not exceed 184.1 lbs/hr. See section A.I.2.b.
OAC rule 3745-21-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-23-06(B)	See section A.I.2.c. See section A.I.2.c.

## 2. Additional Terms and Conditions

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** delaquer unit (P909)

- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

### **1. [40 CFR 63.1506(b)]**

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- ii. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
- c. The afterburner operating temperature and design residence time for a scrap dryer/delacquering kiln/decoating kiln.

### **2. [40 CFR 63.1506(c)]**

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

### **3. [40 CFR 63.1506(d)]**

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** delaquer unit (P909)

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

- a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
- b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
- c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
  - i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(g)]

The owner or operator of a scrap dryer/delacquering kiln/decoating kiln with emissions controlled by an afterburner and a lime-injected fabric filter must:

- a. For each afterburner,
  - i. Maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.
  - ii. Operate each afterburner in accordance with the OM&M plan.
- b. If a bag leak detection system is used to meet the fabric filter monitoring requirements in 40 CFR 63.1510,
  - i. Initiate corrective action within 1-hour of a bag leak detection system alarm and complete any necessary corrective action procedures in accordance with the OM&M plan.
  - ii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator

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takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

4. c. If a continuous opacity monitoring system is used to meet the monitoring requirements in 40 CFR 63.1510, initiate corrective action within 1-hour of any 6-minute average reading of 5 percent or more opacity and complete the corrective action procedures in accordance with the OM&M plan.
  - d. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
  - e. For a continuous injection device, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
5. [40 CFR 63.1506(p)]  
When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]  
On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]  
The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

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- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.
3. [40 CFR 63.1510(c)]  
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to

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confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.

4. [40 CFR 63.1510(d)]

The owner or operator must:

- a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
- b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.

5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

- a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
- b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.

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- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
  - c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
  - d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
  - 6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
  - f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
  - g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
  - h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
  - i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
  - j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
7. [40 CFR 63.1510(g)]

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**Emissions Unit: delaquer unit (P909)**

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in subpart A of this part.
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner.

The monitoring system must record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.

- iii. The recorder response

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**Emissions Unit:** delaquer unit (P909)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

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 Emissions Unit: rotary furnace (P910)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P910)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #9 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	<p>Particulate emissions (stack only) shall not exceed 6.57 tpy.</p> <p>Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.</p> <p>Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.</p> <p>Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.</p> <p>Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.</p> <p>The permittee shall not discharge emissions in excess of:</p>
	40 CFR 63.1505(i) (Subpart RRR)	

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	<p>PM: 0.40 lb per ton of feed/charge;</p> <p>Dioxins and furans toxicity equivalent (D/F TEQ): <math>2.1 \times 10^{-4}</math> grain per ton of feed/charge; and</p> <p>HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.</p> <p>See section A.I.2.a.</p>
<p>OAC rule 3745-18-06(E)(2)</p>	<p>Emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 72.7 lbs/hr.</p>
<p>OAC rule 3745-17-07</p>	<p>See section A.I.2.b.</p>
<p>OAC rule 3745-17-11</p>	<p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
	<p>The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
<p>OAC rule 3745-21-08(B)</p>	<p>See section A.I.2.c.</p>
<p>OAC rule 3745-23-06(B)</p>	<p>See section A.I.2.c.</p>

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

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**Emissions Unit: rotary furnace (P910)**

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

2. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

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**Emissions Unit:** rotary furnace (P910)

c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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**Emissions Unit: rotary furnace (P910)**

4.
  - b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
  - c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
  - d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
  - e. Operate each sidewell furnace such that:
    - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

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**Emissions Unit: rotary furnace (P910)**

approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

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3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

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**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P910)

- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

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**Emissions Unit: rotary furnace (P910)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

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Emissions Unit: rotary furnace (P910)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

- 2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** rotary furnace (P911)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** rotary furnace (P911)

**Activity Description:** Processing aluminum scrap and dross to yield molten aluminum

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary furnace #10 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-06410 issued 3/1/01)	Particulate emissions (stack only) shall not exceed 6.57 tpy.  Emissions of hydrogen chloride (HCl) shall not exceed 6.57 tpy.  Emissions of nitrogen oxides (NOx) shall not exceed 1.47 lbs/hr and 6.44 tpy.  Emissions of carbon monoxide (CO) shall not exceed 1.25 lbs/hr and 5.43 tpy.  Visible particulate emissions shall not exceed 10% opacity from any add-on air pollution control device for the control of particulates.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.  The permittee shall not discharge emissions in excess of:
	40 CFR 63.1505(i) (Subpart RRR)	

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	PM: 0.40 lb per ton of feed/charge;
	Dioxins and furans toxicity equivalent (D/F TEQ): $2.1 \times 10^{-4}$ grain per ton of feed/charge; and
	HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.
	See section A.I.2.a.
OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO <sub>2</sub> ) shall not exceed 72.7 lbs/hr.
	See section A.I.2.b.
OAC rule 3745-17-07	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-08(B)	See section A.I.2.c.
OAC rule 3745-23-06(B)	See section A.I.2.c.

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

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**Emissions Unit: rotary furnace (P911)**

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

### **1. [40 CFR 63.1506(b)]**

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

### **2. [40 CFR 63.1506(c)]**

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and

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**Emissions Unit: rotary furnace (P911)**

c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:

i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

4. [40 CFR 63.1506(m)]

The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:

a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:

i. Initiate corrective action within 1 hour of a bag leak detection system alarm.

Complete the corrective action procedures in accordance with the OM&M plan.

iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.

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4.
  - b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
  - c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
  - d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
  - e. Operate each sidewell furnace such that:
    - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and

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approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

- a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- b. A monitoring schedule for each affected source and emissions unit.
- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.

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**Emissions Unit: rotary furnace (P911)**

3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

  - a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]

The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

  - a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]

These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.

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- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
- b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- i. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- j. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.

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**Emissions Unit: rotary furnace (P911)**

7. [40 CFR 63.1510(h)]

- a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in Subpart A of 40 CFR Part 63.
  
- b. The temperature monitoring device must meet each of these performance and equipment specifications:
  - i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
  - ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
  - iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermo

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**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**  
None

**IV Reporting Requirements**  
None

**V Testing Requirements**  
None

**VI Miscellaneous Requirements**  
None

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 Emissions Unit: reverbatory furnace (P912)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** reverbatory furnace (P912)

**Activity Description:** Melting of aluminum scrap to produce molten aluminum, remelt scrap ingot

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Reverbatory furnace #1 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-5727 issued 7/21/99)  40 CFR 63.1505(i) (Subpart RRR)	Particulate emissions (stack only) shall not exceed 3.0 lbs/hr and 13.2.  Emissions of nitrogen oxides (NOx) shall not exceed 3.9 lbs/hr and 17.1 tpy.  Visible particulate emissions from the stack shall not exceed 10 percent opacity as a 6-minute average.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.  The permittee shall not discharge emissions in excess of:  PM: 0.40 lb per ton of feed/charge;  Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10 <sup>-4</sup> grain per ton of feed/charge; and

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	HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.
OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO <sub>2</sub> ) shall not exceed 162.9 lbs/hr.  See section A.I.2.b.
OAC rule 3745-17-07	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-08(B)	See section A.I.2.c.
OAC rule 3745-23-06(B)	See section A.I.2.c.

## 2. Additional Terms and Conditions

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the

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best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

2. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

- a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

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- b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
- c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
  - i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

- 4. [40 CFR 63.1506(m)]  
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:
  - a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
    - i. Initiate corrective action within 1 hour of a bag leak detection system alarm.  
  
Complete the corrective action procedures in accordance with the OM&M plan.
    - iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
  - b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
  - c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
  - d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

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**Emissions Unit:** reverbatory furnace (P912)

- e. Operate each sidewell furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

- 5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

- 1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
- 2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

  - a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
  - b. A monitoring schedule for each affected source and emissions unit.

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- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
- d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
- e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
  - i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.
3. [40 CFR 63.1510(c)]

The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]

The owner or operator must:

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**Emissions Unit: reverbatory furnace (P912)**

- a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]  
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.
- a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]  
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.
- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
  - b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other

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**Facility ID: 0679030152**

**Emissions Unit: reverbatory furnace (P912)**

bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
- 6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- j. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- k. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
- 7. [40 CFR 63.1510(h)]
  - a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in subpart A of 40 CFR 63.
  - b. The temperature monitoring device must meet each of these performance and equipment specifications:

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**Facility ID: 0679030152**

**Emissions Unit: reverbatory furnace (P912)**

- i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
- ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
- iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermocoupl

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 Facility ID: 0679030152  
 Emissions Unit: reverbatory furnace (P912)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

- Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**

- The permit to install for this emissions unit (P912) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

**III Monitoring and/or Recordkeeping**

- Pollutant: hydrogen fluoride

TLV (ug/m3): 2600

Maximum Hourly Emission Rate (lbs/hr): 1.33

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 9.11

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MAGLC (ug/m3): 61.90

Pollutant: hydrogen chloride

TLV (ug/m3): 7500

Maximum Hourly Emission Rate (lbs/hr): 1.67

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 11.39

MAGLC (ug/m3): 178.6

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

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**Emissions Unit: reveratory furnace (P912)**

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

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None

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 Emissions Unit: reverbatory furnace (P913)

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**Emissions Unit ID:** reverbatory furnace (P913)

**Activity Description:** Melting of aluminum scrap to produce molten aluminum, remelt scrap ingot

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Reverbatory furnace #2 - existing Group 1 furnace vented to a fabric filter with lime injection	OAC rule 3745-31-05(A)(3) (PTI 06-5727 issued 7/21/99)	Particulate emissions (stack only) shall not exceed 3.0 lbs/hr and 13.2.
		Emissions of nitrogen oxides (NOx) shall not exceed 3.9 lbs/hr and 17.1 tpy.
		Visible particulate emissions from the stack shall not exceed 10 percent opacity as a 6-minute average.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(E)(2), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 63, Subpart RRR.
	40 CFR 63.1505(i) (Subpart RRR)	The permittee shall not discharge emissions in excess of:
		PM: 0.40 lb per ton of feed/charge;
		Dioxins and furans toxicity equivalent (D/F TEQ): 2.1 x 10 <sup>-4</sup> grain per ton of feed/charge; and

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	HCl: 0.40 lb per ton of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight.
OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide (SO <sub>2</sub> ) shall not exceed 162.9 lbs/hr.  See section A.I.2.b.
OAC rule 3745-17-07	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-11	The requirements of this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-08(B)	See section A.I.2.c.
OAC rule 3745-23-06(B)	See section A.I.2.c.

**2. Additional Terms and Conditions**

- a. Pursuant to 40 CFR 63.6(c)(5), this emissions unit is part of an existing area source which has increased its emissions such that the source has become a major source after the effective date of 40 CFR 63.1500 - 63.1520 and, as such, is not required to comply with those requirements until March 24, 2003 (per 40 CFR 63.1501(a)).

Therefore, all terms and conditions for this emissions unit which are derived from 40 CFR 63.1500 - 63.1520 (these are designated by the rule citation at the beginning of the term and condition) do not become effective until that date.

- b. The actual SO<sub>2</sub> emissions are the result of the combustion of natural gas, and are negligible; therefore, no monitoring, record keeping, or reporting are required.
- c. The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the

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best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install 06-06410.

## **II Operational Restrictions**

1. [40 CFR 63.1506(b)]

The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- a. The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- b. The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

2. [40 CFR 63.1506(c)]

For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

- a. Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Handbook of Recommended Practice" (incorporated by reference in 40 CFR 63.1502 of this subpart);
- b. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- c. Operate each capture/collection system according to the procedures and requirements in the OM&M plan.

3. [40 CFR 63.1506(d)]

The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

- a. Except as provided in paragraph (c) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

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- b. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
- c. The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
  - i. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and

All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

- 4. [40 CFR 63.1506(m)]  
The owner or operator of a group 1 furnace with emissions controlled by a lime-injected fabric filter must:
  - a. If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
    - i. Initiate corrective action within 1 hour of a bag leak detection system alarm.  
  
Complete the corrective action procedures in accordance with the OM&M plan.
    - iii. Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to initiate corrective action.
  - b. Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
  - c. For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
  - d. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.

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**Emissions Unit:** reverbatory furnace (P913)

- e. Operate each sidewell furnace such that:
  - i. The level of molten metal remains above the top of the passage between the side-well and hearth during reactive flux injection, unless the hearth also is equipped with an add-on control device.

Reactive flux is added only in the sidewell unless the hearth also is equipped with an add-on control device.

- 5. [40 CFR 63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

### **III Monitoring and/or Recordkeeping**

- 1. [40 CFR 63.1510(a)]

On and after the date the initial performance test is completed or required to be completed, whichever date is earlier, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section.
- 2. [40 CFR 63.1510(b)]

The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. Any subsequent changes to the plan must be submitted to the Ohio EPA, Southeast District Office for review and approval. Pending approval by the Ohio EPA, Southeast District Office of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information:

  - a. Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
  - b. A monitoring schedule for each affected source and emissions unit.

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**Emissions Unit: reverbatory furnace (P913)**

- c. Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR 63.1505.
  - d. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
    - i. calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
    - ii. procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in Subpart A of 40 CFR Part 63.
  - e. Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
2. f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in this section, including:
- i. procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - ii. procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- g. A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- h. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device.
3. [40 CFR 63.1510(c)]  
The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR 63.1506(b) are intact and legible.
4. [40 CFR 63.1510(d)]  
The owner or operator must:

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**Facility ID: 0679030152**

**Emissions Unit: reverbatory furnace (P913)**

- a. Install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and
  - b. Inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in 40 CFR 63.1506(c) and record the results of each inspection.
5. [40 CFR 63.1510(e)]  
The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or g/Mg (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.
- a. The accuracy of the weight measurement device or procedure must be plus or minus 1 percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
  - b. The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
6. [40 CFR 63.1510(f)]  
These requirements apply to the owner or operator of a new or existing affected source or existing emission unit using a bag leak detection system.
- a. The owner or operator must install and operate a bag leak detection system for each exhaust stack of a fabric filter.
  - b. Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (September 1997). This document is available from the U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document also is available on the Technology Transfer Network (TTN) under Emission Measurement Technical Information (EMTIC), Continuous Emission Monitoring. Other

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**Facility ID:** 0679030152  
**Emissions Unit:** reverbatory furnace (P913)

bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

- c. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- d. The bag leak detection system sensor must provide output of relative or absolute PM loadings.
- 6. e. The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- f. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- g. For positive pressure fabric filter systems, a bag leak detection system must be installed in each baghouse compartment or cell. For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- j. The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
- k. Following initial adjustment of the system, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection which demonstrates that the fabric filter is in good operating condition.
- 7. [40 CFR 63.1510(h)]
  - a. The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases consistent with the requirements for continuous monitoring systems in subpart A of 40 CFR 63.
  - b. The temperature monitoring device must meet each of these performance and equipment specifications:

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: reverbatory furnace (P913)**

- i. The monitoring system must record the temperature in 15-minute block averages and calculate and record the average temperature for each 3-hour block period.
- ii. The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(n).
- iii. The reference method must be a National Institute of Standards and Technology calibrated reference thermocoupl

**Facility Name:** IMCO Recycling of Ohio Inc.  
**Facility ID:** 0679030152  
**Emissions Unit:** reverbatory furnace (P913)

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>

2. **Additional Terms and Conditions**  
None

**II Operational Restrictions**  
None

**III Monitoring and/or Recordkeeping**

1. The permit to install for this emissions unit (P912) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

**III Monitoring and/or Recordkeeping**

1. Pollutant: hydrogen fluoride  
  
 TLV (ug/m3): 2600  
  
 Maximum Hourly Emission Rate (lbs/hr): 1.33  
  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 9.11

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MAGLC (ug/m3): 61.90

Pollutant: hydrogen chloride

TLV (ug/m3): 7500

Maximum Hourly Emission Rate (lbs/hr): 1.67

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 11.39

MAGLC (ug/m3): 178.6

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

**Facility Name: IMCO Recycling of Ohio Inc.**

**Facility ID: 0679030152**

**Emissions Unit: reverbatory furnace (P913)**

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

**IV Reporting Requirements**

None

**V Testing Requirements**

None

**VI Miscellaneous Requirements**

None