



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: September 24, 2012

RE: Aleris Recycling / 169-32249-00035

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER-AM.dot12/3/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mr. Archie Haney

September 24, 2012

Aleris Recycling, Inc.  
305 Dimension Ave  
Wabash, IN 46992

Re: 169-32249-00035  
Third Administrative Amendment to  
F169-26165-00035

Dear Mr. Haney:

Aleris Recycling, Inc was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F169-26165-00035 on January 15, 2009 for a stationary Secondary aluminum smelting operation located at 305 Dimension Ave, Wabash, Indiana. On August 24, 2012, the Office of Air Quality (OAQ) received an application from the source requesting:

- (a) to add insignificant combustion units: Two (2) pre-heat burners, each rated at 0.750 MMBtu/hr.

Pursuant to 326 IAC 2-8-10(a)(13), this change to the permit is considered an administrative amendment because the permit is amended to add an emissions unit, subject to 326 IAC 2-1.1-3 (Exemptions), at the request of the Permittee.

The PTE of the emission units is as follows:

Process/ Emission Unit	PTE of Proposed Modification (tons/year)									
	PM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e	Total HAPs	Worst Single HAP
Front-end Loader	0.28	0.13	0.02	-	-	-	-	-	-	-
Natural Gas Combustion	0.01	0.05	0.05	0.004	0.64	0.04	0.54	778	0.01	0.01
<b>Total PTE of Proposed Modification</b>	<b>0.29</b>	<b>0.18</b>	<b>0.07</b>	<b>0.004</b>	<b>0.64</b>	<b>0.04</b>	<b>0.54</b>	<b>778</b>	<b>0.01</b>	<b>0.01 (Hexane)</b>

No new state rules are applicable to this source due to the addition of the emission unit.

- (b) to add an emission unit that has been accidentally removed from the permit.

The front-end loader truck loading is an existing operation that had been accidentally removed in FESOP SPR 169-30783-00035. The front-end loaders pick up the end product (e.g., aluminum fines) from inside the building and loads the end product into open dump trailers located outside the building (see table above for PTE of emission unit).

Pursuant to 326 IAC 2-8-10(a)(2)(B), this change to the permit is considered an administrative amendment because the permit is amended to change the descriptive

information concerning the source of emissions unit, where the revision will not trigger a new application requirement.

No new state rules are applicable to this source due to the addition of the front end loader.

- (c) to change the total insignificant activities emissions. The insignificant activities emissions from the Sizing Line of 4.99 tons of PM and 1.48 tons of PM10 per year (FESOP Renewal 169-26165-00035) were incorporated into the three Milling Operations emissions (FESOP SPR 169-30783-00035). However, these emissions were still included with the insignificant activities emissions in FESOP SPR 169-30783-00035. With this administrative amendment the sizing line emissions of 4.99 tons of PM and 1.48 tons of PM10 per year have been deleted from the insignificant activities emissions to avoid duplication.

Pursuant to 326 IAC 2-8-10(a)(13), this change to the permit is considered an administrative amendment because the permit be amended to add an emissions unit, subject to 326 IAC 2-1.1-3 (Exemptions), at the request of the Permittee.

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Amendment tons/year									
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Milling Operations Stage #1 (MB1)***	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64E+00	7.96E-01
Milling Operations Stage #2 and Raw Material Unloading Area(MB2)***	35.43	35.43	35.43	0.00	0.00	0.00	0.00	0.00	1.64E+00	7.96E-01
Milling Operations Stage #3 (MB3)***	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64E+00	7.96E-01
Insignificant Activities	5.02	1.59	1.59	0.01	1.44	0.08	1.21	1,745	0.03	0.027 (Hexane)
Fugitive Emissions	2.03	0.41	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	84.06	79.01	78.70	0.01	1.44	0.08	1.21	1,745	4.95	2.39 (Manganese)
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	100	100	100	100	100	100	100	100,000	NA	NA
<p>*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".</p> <p>**The 100,000 CO<sub>2</sub>e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.</p> <p>*** The source has elected to limit its emissions for these units for PM, PM10, and PM2.5.</p>										

The table below summarizes the potential to emit of the entire source, with updated emissions shown as **bold** values and previous emissions shown as ~~strickthrough~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Amendment (tons/year)									
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Milling Operations Stage #1 (MB1)***	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64	0.80
Milling Operations Stage #2 and Raw Material Unloading Area(MB2)***	35.43	35.43	35.43	0.00	0.00	0.00	0.00	0.00	1.64	0.80
Milling Operations Stage #3 (MB3)***	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64	0.80
Insignificant Activities	<del>5.02</del> <b>0.04</b>	<del>1.59</del> <b>0.16</b>	<del>1.59</del> <b>0.16</b>	0.01	1.44 <b>2.08</b>	<del>0.08</del> <b>0.12</b>	1.24 <b>1.75</b>	1,745 <b>2,523</b>	0.03 <b>0.04</b>	<del>0.027</del> <b>0.04</b> (Hexane)
Fugitive Emissions	<del>2.03</del> <b>2.31</b>	<del>0.41</del> <b>0.54</b>	<del>0.10</del> <b>0.12</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	<del>84.06</del> <b>79.37</b>	<del>79.04</del> <b>77.71</b>	<del>78.70</del> <b>77.29</b>	0.01	1.44 <b>2.09</b>	<del>0.08</del> <b>0.11</b>	1.24 <b>1.75</b>	1,745 <b>2,522</b>	4.95 <b>4.96</b>	2.39 (Manganese)
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	100	100	100	100	100	100	100	100,000	NA	NA

\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".  
\*\*The 100,000 CO<sub>2</sub>e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.  
\*\*\* The source has elected to limit its emissions for these units for PM, PM10, and PM2.5.

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Amendment (tons/year)									
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Milling Operations Stage #1 (MB1)***	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64E+00	7.96E-01
Milling Operations Stage #2 and Raw Material Unloading Area(MB2)***	35.43	35.43	35.43	0.00	0.00	0.00	0.00	0.00	1.64E+00	7.96E-01
Milling Operations Stage #3 (MB3)***	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64E+00	7.96E-01
Insignificant Activities	0.03	0.16	0.16	0.01	2.08	0.12	1.75	2,523	0.04	0.04 (Hexane)
Fugitive Emissions	2.31	0.54	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	79.37	77.71	77.29	0.01	2.09	0.11	1.75	2,522	4.96	2.39 (Manganese)
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	100	100	100	100	100	100	100	100,000	NA	NA

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Amendment (tons/year)									
	PM	PM10*	PM2.5	SO <sub>2</sub>	NOx	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
<p>*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".</p> <p>**The 100,000 CO<sub>2</sub>e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.</p> <p>*** The source has elected to limit its emissions for these units for PM, PM10, and PM2.5.</p>										

Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with the deleted language as ~~strikeouts~~ and new language **bolded**:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour with a total heat input capacity of ~~3.435~~ **4.935** million British thermal units per hour consisting of:
  - (1) One (1) office hot water heater, rated at 0.040 million British thermal units per hour.
  - (2) One (1) office furnace, rated at 0.070 million British thermal units per hour.
  - (3) Two (2) break room furnaces, rated at 0.070 million British thermal units per hour each.
  - (4) One (1) break room hot water heater, rated at 0.040 million British thermal units per hour.
  - (5) One (1) maintenance furnace, rated at 0.075 million British thermal units per hour.
  - (6) One (1) maintenance heater, rated at 0.100 million British thermal units per hour.
  - (7) Three (3) pre-heat burners, each rated at 0.990 million British thermal units per hour.
  - (8) Two (2) pre-heat burners, each rated at 0.750 million British thermal units per hour.**

\*\*\*

- (i) Front-end loader up loading product (e.g., aluminum fines) from inside the building and loading the product onto open dump trailers located outside the building.**

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: [www.idem.in.gov](http://www.idem.in.gov)

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Bruce Farrar, of my staff, at 317-234-5401 or 1-800-451-6027, and ask for extension 4-5401.

Sincerely,



Iryn Calilung, Section Chief  
Permits Branch  
Office of Air Quality

Attachments: Updated Permit, Appendix A

IC/BF

cc: File - Wabash County  
Wabash County Health Department  
U.S. EPA, Region V  
Compliance and Enforcement Branch  
Billing, Licensing and Training Section



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## Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

**Aleris Recycling, Inc.**  
**305 Dimension Avenue**  
**Wabash, Indiana 46992**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

**The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F169-26165-00035	
Issued by: <i>original signed by</i> Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: January 15, 2009  Expiration Date: January 15, 2019

First Administrative Amendment No. 169-29330-00035, issued June 24, 2010  
Interim Significant Permit Revision No. 169-30783i-00035, issued September 8, 2011  
First Significant Permit Revision No. 169-30783-00035, issued December 12, 2011  
Second Administrative Amendment No. 169-31840-00035, issued June 27, 2012

Third Administrative Amendment No. 169-32249-00035	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: September 24, 2012  Expiration Date: January 15, 2019

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**Compliance Determination Requirements**

- D.3.5 Particulate Matter (PM) [326 IAC 2-8-4(1)(D)]

**Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

- D.3.6 Baghouse Parametric Monitoring
- D.3.7 Broken or Failed Bag Detection
- D.3.8 Visible Emissions Notations

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

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**Compliance Determination Requirements**

- D.4.5 Particulate Matter (PM) [326IAC 2-8-4(1)(D)]

**Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary Secondary aluminum smelting operation.

Source Address:	305 Dimension Avenue, Wabash, Indiana 46992
General Source Phone Number:	(260) 563-2409
SIC Code:	3341 (Secondary Smelting and Refining of Nonferrous Metals)
County Location:	Wabash
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories (Secondary Metal Production)

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) raw material unloading area, consisting of thirteen (13) bays, identified as RMUA, approved for modification in 2011 and 2012, using baghouse MB2 for particulate control, and exhausting through stack S-MB2;
- (b) One (1) Milling Operation Stage #1, approved for modification in 2011, with a maximum throughput capacity of twenty (20) tons per hour of aluminum dross and/or salt cake, all using baghouse MB1 for particulate control, exhausting through stack S-MB1, and consisting of the following:
  - (1) Two (2) Grizzly Feeders, identified as GF1 and GF2, installed in 1998;
  - (2) One (1) tumbler, identified as T, installed in 1996;
  - (3) One (1) shaker table infeed conveyor, identified as ST1;
  - (4) Six (6) screw conveyors, identified as SC1 through SC6;
  - (5) One (1) belt conveyor, identified as BC2.
- (c) One (1) Milling Operation Stage #2, approved for modification in 2011 and 2012, with a maximum throughput capacity of twenty (20) tons per hour of aluminum dross and/or salt cake, all using baghouse MB2 for particulate control, exhausting through stack S-MB2, and consisting of the following:
  - (1) One (1) Mega Slam primary crusher, identified as MS, installed in 1998;
  - (2) One (1) Mega Slam shaker table/grizzly, identified as ST2;

- (3) One (1) Midwest screen, identified as SS1;
  - (4) Six (6) screw conveyors, identified as SC7 through SC12; and
  - (5) Four (4) belt conveyors, identified as BC1, BC3, BC4, and BC5.
- (d) One (1) Milling Operation Stage #3, approved for modification in 2011 and 2012, with a maximum throughput capacity of twenty (20) tons per hour of aluminum dross and/or salt cake, all using baghouse MB3 for particulate control, exhausting through stack S-MB3, and consisting of the following:
- (1) One (1) Cage Mill secondary crusher, identified as CM, installed in 1998;
  - (2) One (1) Midwest screen, identified as SS2;
  - (3) Eleven (11) screw conveyors, identified as SC13 through SC23;
  - (4) One (1) belt conveyor, identified as BC6; and
  - (5) Three (3) tank discharge vibratory feeders, identified as PF1, PF2, and PF3.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour with a total heat input capacity of 4.935 million British thermal units per hour consisting of:
- (1) One (1) office hot water heater, rated at 0.040 million British thermal units per hour.
  - (2) One (1) office furnace, rated at 0.070 million British thermal units per hour.
  - (3) Two (2) break room furnaces, rated at 0.070 million British thermal units per hour each.
  - (4) One (1) break room hot water heater, rated at 0.040 million British thermal units per hour.
  - (5) One (1) maintenance furnace, rated at 0.075 million British thermal units per hour.
  - (6) One (1) maintenance heater, rated at 0.100 million British thermal units per hour.
  - (7) Three (3) pre-heat burners, each rated at 0.990 million British thermal units per hour.
  - (8) Two (2) pre-heat burners, each rated at 0.750 million British thermal units per hour.
- (b) Various types of diesel-fueled mobile equipment.
- (c) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.

- (d) Cleaners and solvents characterized as follows:
  - (1) having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38°C (100°F) or;
  - (2) having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (e) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (f) Paved roads and parking lots with public access.
- (g) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (h) One (1) diesel above-ground storage tank, approved for construction in 2011, with a maximum storage capacity of one thousand (1,000) gallons, and dispensing two thousand (2,000) gallons per month.
- (i) Front-end Loader up loading product (e.g., aluminum fines) from inside the building and loading the product onto open dump trailers located outside the building.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-8-1]

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

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- (a) This permit, F169-26165-00035, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

### B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.5 Severability [326 IAC 2-8-4(4)]

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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This permit does not convey any property rights of any sort or any exclusive privilege.

### B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

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- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

### B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

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- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

- (i) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and
- (ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

**B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]**

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IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.12 Emergency Provisions [326 IAC 2-8-12]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or  
Telephone Number: 317-233-0178 (ask for Compliance and Enforcement Branch)  
Facsimile Number: 317-233-6865

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.13** Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F169-26165-00035 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
- (2) revised, or
- (3) deleted.

- (b) All previous registrations and permits are superseded by this permit.

**B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]**

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

**B.15 Reserved**

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**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

**B.17 Permit Renewal [326 IAC 2-8-3(h)]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Development Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

**B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]**

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- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permit Administration and Development Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

**B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permit Administration and Development Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(1) and (c).

- (b) Emission Trades [326 IAC 2-8-15(b)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:  
  
Indiana Department of Environmental Management  
Permit Administration and Development Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

**B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]**

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For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

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Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

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The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (4) The potential to emit greenhouse gases, as CO<sub>2</sub>e, shall be limited to less than 100,000 tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

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The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on October 7, 2008. The plans included as Attachment B.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.

- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

### **Testing Requirements [326 IAC 2-8-4(3)]**

#### **C.9 Performance Testing [326 IAC 3-6]**

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- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require

a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

### **Compliance Requirements [326 IAC 2-1.1-11]**

#### **C.10 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### **Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

#### **C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]**

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Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### **C.12 Reserved**

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#### **C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an

alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
  - (1) initial inspection and evaluation;
  - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
  - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
  - (1) monitoring results;
  - (2) review of operation and maintenance procedures and records; and/or
  - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

#### **C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

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- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:
- (AA) All calibration and maintenance records.
  - (BB) All original strip chart recordings for continuous monitoring instrumentation.
  - (CC) Copies of all reports required by the FESOP.
- Records of required monitoring information include the following:
- (AA) The date, place, as defined in this permit, and time of sampling or measurements.
  - (BB) The dates analyses were performed.
  - (CC) The company or entity that performed the analyses.
  - (DD) The analytical techniques or methods used.
  - (EE) The results of such analyses.
  - (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

#### **C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) The address for report submittal is:  
  
Indiana Department of Environmental Management  
Compliance and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reserved
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

### **Stratospheric Ozone Protection**

#### **C.19 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction

**SECTION D.1 Reserved**

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (b) One (1) Milling Operation Stage #1, approved for construction in 2011, with a maximum throughput capacity of twenty (20) tons per hour of aluminum dross and/or salt cake, all using baghouse MB1 for particulate control, exhausting through stack S-MB1, and consisting of the following:
- (1) Two (2) Grizzly Feeders, identified as GF1 and GF2, installed in 1998;
  - (2) One (1) tumbler, identified as T, installed in 1996;
  - (3) One (1) shaker table infeed conveyor, identified as ST1;
  - (4) Six (6) screw conveyors, identified as SC1 through SC6; and
  - (5) One (1) belt conveyor, identified as BC2.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4]

#### D.2.1 $PM_{10}$ and $PM_{2.5}$ Limitations [326 IAC 2-8-4] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-8-4, the  $PM_{10}$  emissions from the milling operation Stage #1 shall not exceed 4.75 pounds per hour.
- (b) Pursuant to 326 IAC 2-8-4, the  $PM_{2.5}$  emissions from the milling operation Stage #1 shall not exceed 4.75 pounds per hour.

Compliance with the above limit, combined with the limited potential to emit  $PM_{10}$  and  $PM_{2.5}$  from other emission units at the source, shall limit the  $PM_{10}$  and  $PM_{2.5}$  from the entire source to less than 100 tons per twelve (12) consecutive month period, each, and render 327 IAC 2-2 and 326 IAC 2-7 not applicable.

#### D.2.2 PM Limitations [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the PM emissions from the milling operation Stage #1 shall not exceed 4.75 pounds per hour.

Compliance with the above limit, combined with the limited potential to emit PM from other emission units at the source, shall limit the PM from the entire source to less than 100 tons per twelve (12) consecutive month period and render 327 IAC 2-2 not applicable.

#### D.2.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate from the milling operation Stage #1 shall not exceed 30.51 pounds per hour when operating at a process weight rate of 20.0 tons per hour.

This limit is based upon the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

#### D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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A Preventative Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

### Compliance Determination Requirements

#### D.2.5 Testing Requirements [326 IAC 2-1.1-11]

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- (a) In order to demonstrate compliance with Conditions D.2.2 and D.2.3, the Permittee shall perform PM testing of the milling operation Stage #1, consisting of two (2) Grizzly Feeders, one (1) tumbler, one (1) shaker table infeed conveyor, six (6) screw conveyors, and one (1) belt conveyor, within 180 days of startup, utilizing methods as approved by the Commissioner.
- (b) In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM10 testing of the milling operation Stage #1, consisting of two (2) Grizzly Feeders, one (1) tumbler, one (1) shaker table infeed conveyor, six (6) screw conveyors, and one (1) belt conveyor, within 180 days of startup, utilizing methods as approved by the Commissioner.
- (c) In order to demonstrate compliance with Conditions D.2.1, the Permittee shall perform PM2.5 testing of the milling operation Stage #1, consisting of two (2) Grizzly Feeders, one (1) tumbler, one (1) shaker table infeed conveyor, six (6) screw conveyors, and one (1) belt conveyor, within 180 days of startup, utilizing methods as approved by the Commissioner.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

#### D.2.6 Particulate Matter (PM) [326 IAC 2-8-4(1)(D)]

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- (a) In order to comply with Conditions D.2.1 and D.2.2, the baghouse for PM control shall be in operation at all times when the milling operation Stage #1 is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also included the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.2.7 Baghouse Parametric Monitoring [326 IAC 2-8-5]

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- (a) The Permittee shall record the pressure drop across the baghouse, identified as MB1, used in conjunction with the milling operation Stage #1, at least once per day when the milling operation Stage #1 is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 0.5 and

8.0 inches of water, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (b) The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

#### D.2.8 Broken or Failed Bag Detection

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- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.

Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.

Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.

#### D.2.9 Visible Emissions Notations

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- (a) Visible emission notations of the milling operation Stage #1 stack exhaust, S-MB1, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

## **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

### **D.2.10 Record Keeping Requirements**

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- (a) To document the compliance status with Condition D.2.7, the Permittee shall maintain daily records of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason of the lack of a pressure drop reading (e.g., the plant did not operate that day).
- (b) To document the compliance status with Condition D.2.9, the Permittee shall maintain records of visible emission notations of the milling operation Stage #1 stack exhaust S-MB1 once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the plant did not operate that day).
- (c) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

## SECTION D.3

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) One (1) raw material unloading area, consisting of thirteen (13) bays, identified as RMUA, approved for modification in 2011 and 2012, using baghouse MB2 for particulate control, and exhausting through stack S-MB2;
- (c) One (1) Milling Operation Stage #2, approved for modification in 2011 and 2012, with a maximum throughput capacity of twenty (20) tons per hour of aluminum dross and/or salt cake, all using baghouse MB2 for particulate control, exhausting through stack S-MB2, and consisting of the following:
  - (1) One (1) Mega Slam primary crusher, identified as MS, installed in 1998;
  - (2) One (1) Mega Slam shaker table/grizzly, identified as ST2;
  - (3) One (1) Midwest screen, identified as SS1;
  - (4) Six (6) screw conveyors, identified as SC7 through SC12; and
  - (5) Four (4) belt conveyors, identified as BC1, BC3, BC4, and BC5.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4]

#### D.3.1 PM<sub>10</sub> and PM<sub>2.5</sub> Limitations [326 IAC 2-8-4] [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-8-4, the PM<sub>10</sub> emissions from the milling operation Stage #2 and the raw material unloading area (exhausting through MB2) shall not exceed 8.09 pounds per hour.
- (b) Pursuant to 326 IAC 2-8-4, the PM<sub>2.5</sub> emissions from the milling operation Stage #2 and the raw material unloading area (exhausting through MB2) shall not exceed 8.09 pounds per hour.

Compliance with the above limit, combined with the limited potential to emit PM<sub>10</sub> and PM<sub>2.5</sub> from other emission units at the source, shall limit the PM<sub>10</sub> and PM<sub>2.5</sub> from the entire source to less than 100 tons per twelve (12) consecutive month period, each, and render 327 IAC 2-2 and 326 IAC 2-7 not applicable.

#### D.3.2 PM Limitations [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the PM emissions from the milling operation Stage #2 and the raw material unloading area (exhausting through MB2) shall not exceed 8.09 pounds per hour.

Compliance with the above limit, combined with the limited potential to emit PM from other emission units at the source, shall limit the PM from the entire source to less than 100 tons per twelve (12) consecutive month period and render 327 IAC 2-2 not applicable.

#### D.3.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) the particulate from the processes listed in the table below shall be limited by the following:

Emission Unit	Process Weight Rate (tons/hr)	Allowable PM Limit (lbs/hr)
milling operation Stage #2	20.0	30.51
raw material unloading area	20.0	30.51

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

#### D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

---

A Preventative Maintenance Plan, is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

### Compliance Determination Requirements

#### D.3.5 Testing Requirements [326 IAC 2-1.1-11]

---

- (a) In order to demonstrate compliance with Conditions D.3.2 and D.3.3, the Permittee shall perform PM testing of the milling operation Stage #2 and the raw material unloading area, within 180 days of startup of baghouse MB2, utilizing methods as approved by the Commissioner.
- (b) In order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM10 testing of the milling operation Stage #2 and the raw material unloading area, within 180 days of startup of baghouse MB2, utilizing methods as approved by the Commissioner.
- (c) In order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM2.5 testing of the milling operation Stage #2 and the raw material unloading area, within 180 days of startup of baghouse MB2, utilizing methods as approved by the Commissioner.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

#### D.3.6 Particulate Matter (PM) [326 IAC 2-8-4(1)(D)]

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- (a) In order to comply with Conditions D.3.1 and D.3.2, the baghouse for PM control shall be in operation at all times when either the milling operation Stage #2 or the raw material unloading area is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also

included the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

### **Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

#### **D.3.7 Baghouse Parametric Monitoring [326 IAC 2-8-5]**

---

- (a) The Permittee shall record the pressure drop across the baghouse, identified as MB2, used in conjunction with the milling operation Stage #2 and the raw material unloading area, at least once per day when either the milling operation Stage #2 or the raw material unloading area is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 0.5 and 8.0 inches of water, unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

#### **D.3.8 Broken or Failed Bag Detection**

---

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.  
  
Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.  
  
Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.

#### **D.3.9 Visible Emissions Notations**

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- (a) Visible emission notations of the milling operation Stage #2 stack and the raw material unloading area exhaust stack, S-MB2, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### **D.3.10 Record Keeping Requirements**

---

- (a) To document the compliance status with Condition D.3.7, the Permittee shall maintain daily records of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason of the lack of a pressure drop reading (e.g., the plant did not operate that day).
- (b) To document the compliance status with Condition D.3.9, the Permittee shall maintain records of visible emission notations of the milling operation Stage #2 and the raw material unloading area stack exhaust S-MB2 once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the plant did not operate that day).
- (c) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

**SECTION D.4.**

**EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

- (d) One (1) Milling Operation Stage #3, approved for modification in 2011 and 2012, with a maximum throughput capacity of twenty (20) tons per hour of aluminum dross and/or salt cake, all using baghouse MB3 for particulate control, exhausting through stack S-MB3, and consisting of the following:
- (1) One (1) Cage Mill secondary crusher, identified as CM, installed in 1998;
  - (2) One (1) Midwest screen, identified as SS2;
  - (3) Eleven (11) screw conveyors, identified as SC13 through SC23;
  - (4) One (1) belt conveyor, identified as BC6; and
  - (5) Three (3) tank discharge vibratory feeders, identified as PF1, PF2, and PF3.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4]**

**D.4.1 PM<sub>10</sub> and PM<sub>2.5</sub> Limitations [326 IAC 2-8-4] [326 IAC 2-2]**

- (a) Pursuant to 326 IAC 2-8-4, the PM<sub>10</sub> emissions from the milling operation Stage #3 shall not exceed 4.75 pounds per hour.
- (b) Pursuant to 326 IAC 2-8-4, the PM<sub>2.5</sub> emissions from the milling operation Stage #3 shall not exceed 4.75 pounds per hour.

Compliance with the above limit, combined with the limited potential to emit PM10 and PM2.5 from other emission units at the source, shall limit the PM10 and PM2.5 from the entire source to less than 100 tons per twelve (12) consecutive month period, each, and render 327 IAC 2-2 and 326 IAC 2-7 not applicable.

**D.4.2 PM Limitations [326 IAC 2-2]**

Pursuant to 326 IAC 2-8-4, the PM emissions from the milling operation Stage #3, shall not exceed 4.75 pounds per hour.

Compliance with the above limit, combined with the limited potential to emit PM from other emission units at the source, shall limit the PM from the entire source to less than 100 tons per twelve (12) consecutive month period and render 327 IAC 2-2 not applicable.

**D.4.3 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2, the particulate from the milling operation Stage #3 shall not exceed 30.51 pounds per hour when operating at a process weight rate of 20.0 tons per hour.

This limit is based upon the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and}$$

P = process weight rate in tons per hour

#### D.4.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

---

A Preventative Maintenance Plan, is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

### Compliance Determination Requirements

#### D.4.5 Testing Requirements [326 IAC 2-1.1-11]

---

- (a) In order to demonstrate compliance with Conditions D.4.2 and D.4.3, the Permittee shall perform PM testing of the milling operation Stage #3, consisting of one (1) Cage Mill secondary crusher, one (1) Midwest screen, eleven (11) screw conveyors, one (1) belt conveyor, and three (3) tank discharge vibratory feeders, within 180 days of startup, utilizing methods as approved by the Commissioner.
- (b) In order to demonstrate compliance with Condition D.4.1, the Permittee shall perform PM10 testing of the milling operation Stage #3, consisting of one (1) Cage Mill secondary crusher, one (1) Midwest screen, eleven (11) screw conveyors, one (1) belt conveyor, and three (3) tank discharge vibratory feeders, within 180 days of startup, utilizing methods as approved by the Commissioner.
- (c) In order to demonstrate compliance with Condition D.4.1, the Permittee shall perform PM2.5 testing of the milling operation Stage #3, consisting of one (1) Cage Mill secondary crusher, one (1) Midwest screen, eleven (11) screw conveyors, one (1) belt conveyor, and three (3) tank discharge vibratory feeders, within 180 days of startup, utilizing methods as approved by the Commissioner.

These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

#### D.4.6 Particulate Matter (PM) [326 IAC 2-8-4(1)(D)]

---

- (a) In order to comply with Conditions D.4.1 and D.4.2, the baghouse for PM control shall be in operation at all times when the milling operation Stage #3 is in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also included the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.4.7 Baghouse Parametric Monitoring [326 IAC 2-8-5]

---

- (a) The Permittee shall record the pressure drop across the baghouse, identified as MB3, used in conjunction with the milling operation Stage #3, at least once per day when the milling operation Stage #3 is in operation. When, for any one reading, the pressure drop across the baghouse is outside of the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 0.5 and 8.0 inches of water, unless a different upper-bound or lower-bound value for this range is

determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (b) The instruments used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

#### D.4.8 Broken or Failed Bag Detection

---

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.

Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.

Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.

#### D.4.9 Visible Emissions Notations

---

- (a) Visible emission notations of the milling operation Stage #3 stack exhaust, S-MB3, shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

## **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

### **D.4.10 Record Keeping Requirements**

---

- (a) To document the compliance status with Condition D.4.7, the Permittee shall maintain daily records of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason of the lack of a pressure drop reading (e.g., the plant did not operate that day).
- (b) To document the compliance status with Condition D.4.9, the Permittee shall maintain records of visible emission notations of the milling operation Stage #3 stack exhaust S-MB3 once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the plant did not operate that day).
- (c) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Aleris Recycling, Inc.  
Source Address: 305 Dimension Avenue, Wabash, Indiana 46992  
FESOP Permit No.: F169-26165-00035

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)\_\_\_\_\_
- Report (specify)\_\_\_\_\_
- Notification (specify)\_\_\_\_\_
- Affidavit (specify)\_\_\_\_\_
- Other (specify)\_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance and Enforcement Branch  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: Aleris Recycling, Inc.  
Source Address: 305 Dimension Avenue, Wabash, Indiana 46992  
FESOP Permit No.: F169-26165-00035

**This form consists of 2 pages**

**Page 1 of 2**

- This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance and Enforcement Branch); and
  - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Aleris Recycling, Inc.  
Source Address: 305 Dimension Avenue, Wabash, Indiana 46992  
FESOP Permit No.: F169-26165-00035

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Appendix A : Emission Calculations - Entire Source

Company Name: Aleris Recycling, Inc.  
 Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992  
 Permit Number: 169-32249-00035  
 Plt ID: 169-00035  
 Reviewer: Bruce Farrar  
 Date: August 24, 2012

Uncontrolled Potential Emissions (Before Controls) (TPY)

Emission Units / Control Device	PM	PM-10	PM-2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Worst HAP	HAP
Milling Operations Stage #1 / MB1	7508.57	7508.57	7508.57	0.00	0.00	0.00	0.00	0.00	1.64	0.80	Manganese
Milling Operations Stage #2 and Raw Material Unloading Area (RMUA) / MB2	7508.57	7508.57	7508.57	0.00	0.00	0.00	0.00	0.00	1.64	0.80	Manganese
Milling Operations Stage #3 / MB3	7508.57	7508.57	7508.57	0.00	0.00	0.00	0.00	0.00	1.64	0.80	Manganese
Insignificant Activities	0.03	0.11	0.11	0.01	1.48	0.08	1.24	1,781	0.03	0.03	Hexane
New Combustion Units (Pre-heat burners)*	0.01	0.05	0.05	3.86E-03	0.64	0.04	0.54	778	0.01	0.01	Hexane
Fugitive Emissions	4.44	0.89	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fugitive Emissions (Front-end Loaders)*	0.28	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Total</b>	<b>22,530</b>	<b>22,527</b>	<b>22,526</b>	<b>0.01</b>	<b>2.12</b>	<b>0.12</b>	<b>1.78</b>	<b>2,558</b>	<b>4.97</b>	<b>2.39</b>	<b>Manganese</b>

SUMMARY of Entire Source

Controlled Potential Emissions (After Controls) (TPY)

Emission Units / Control Device	PM	PM-10	PM-2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Total HAPs
Milling Operations Stage #1 / MB1	18.77	18.77	18.77	0.00	0.00	0.00	0.00	0.00	4.10E-03
Milling Operations Stage #2 and Raw Material Unloading Area (RMUA) / MB2	18.77	18.77	18.77	0.00	0.00	0.00	0.00	0.00	4.10E-03
Milling Operations Stage #3 / MB3	18.77	18.77	18.77	0.00	0.00	0.00	0.00	0.00	4.10E-03
Insignificant Activities	0.03	0.11	0.11	0.01	1.48	0.08	1.24	1,781	2.78E-02
New Combustion Units (Pre-heat burners)*	0.01	0.05	0.05	0.00	0.64	0.04	0.54	778	1.22E-02
Fugitive Emissions	2.03	0.41	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Emissions (Front-end Loaders)*	0.28	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total:</b>	<b>58.67</b>	<b>57.01</b>	<b>56.60</b>	<b>0.01</b>	<b>2.12</b>	<b>0.12</b>	<b>1.78</b>	<b>2,558</b>	<b>5.23E-02</b>

SUMMARY of Entire Source

Limited Emissions (TPY)

Emission Units / Control Device	PM	PM-10	PM-2.5	SO2	NOx	VOC	CO	GHGs as CO2e	Total HAPs
Milling Operations Stage #1 / MB1	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64
Milling Operations Stage #2 and Raw Material Unloading Area (RMUA) / MB2	35.43	35.43	35.43	0.00	0.00	0.00	0.00	0.00	1.64
Milling Operations Stage #3 / MB3	20.79	20.79	20.79	0.00	0.00	0.00	0.00	0.00	1.64
Insignificant Activities	0.03	0.11	0.11	0.01	1.48	0.08	1.24	1,781	0.03
New Combustion Units (Pre-heat burners)*	0.01	0.05	0.05	3.86E-03	0.64	0.04	0.54	778	0.01
Fugitive Emissions	2.03	0.41	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Emissions (Front-end Loaders)*	0.28	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total:</b>	<b>79.37</b>	<b>77.71</b>	<b>77.30</b>	<b>0.01</b>	<b>2.12</b>	<b>0.12</b>	<b>1.78</b>	<b>2,558</b>	<b>4.97</b>

\* Emission Units added due to Administrative Amendment 169-32249-00035

**Appendix A: Emissions Calculations  
Secondary Aluminum Operations**

**Company Name: Aleris Recycling, Inc.**  
**Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992**  
**Permit Number: 169-32249-00035**  
**Pit ID: 169-00035**  
**Reviewer: Bruce Farrar**  
**Date: August 24, 2012**

**Baghouse MB1, serving the Milling Operation Stage #1 Processing Area**

Control Device	Vent ID	Outlet Grain Loading	Flow Rate	Control Efficiency	Number of Units	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5 PTE	
		(gr/acfm)	(cfm)	(%)		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Baghouse MB1	S-MB1	0.0125	40000	99.75%	1	1714.29	7508.57	4.286	18.77
<b>Total PTE:</b>						<b>7508.57</b>		<b>18.77</b>	

Limited PM/PM10/PM2.5 PTE	
(lb/hr)	(ton/yr)
4.75	20.79

**Notes:**

Flow rate of 40000 cfm and control efficiency of 99.75% were provided by source.

Grain loading emission rate provided by source and based on information provided by baghouse manufacturer and process knowledge.

Although there are several emission points in Milling Operation Stage #1 (described below), they are controlled by one baghouse. Calculations are based on grain loading from the baghouse; therefore, the number of units is one (1).

Metal HAPs from this baghouse are shown in a separate worksheet.

**Methodology:**

Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)

Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)

Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/acfm) \* Flow Rate (cfm) \* 60 minutes / 1 hr \* 1lb / 7000 gr \* Number of Units

Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) \* 8760 hrs / 2000 lbs

**Milling Operation Stage #1 Processing Area includes:**

- Grizzly Feeders, GF1 and GF2
- Tumbler, T
- Shaker Table Infeed Conveyor, ST1
- Screw Conveyors, SC1 through SC6
- Belt Conveyor, BC2

**Methodology**

Concentration of HAPs in Baghouse Dust Measured at Alumitech of Wabash, Inc., and was incorporated into FESOP 169-26165-00035, issued January 15, 2009.

Relative Concentration in percent in the percent of total HAPs

The Indexed to Tumbler Dust Most Recent Tumbler RCRA Waste Determination Analysis (TCLP) of Lead x 20 (measured leachable and back calculated solids for lead)

For the other HAPs it is the Lead Value (10) Times the Ratio of the Concentration of the HAP to the Concentration of Lead

Conversion of TPY to kg/yr, multiply by 907.1847

Potential HAPs Before Controls (mg/yr) = HAP Indexed to Tumbler Dust (mg/kg) times PM PTE (kg/yr)

Potential HAPs Before Controls (TPY) with 150% Safety Factor = 1.5 times Potential HAPs Before Controls (mg/yr) times 907184700 mg/ton

**Appendix A: Emissions Calculations  
Secondary Aluminum Operations**

**Company Name:** Aleris Recycling, Inc.  
**Address City IN Zip:** 305 Dimension Avenue, Wabash, Indiana 46992  
**Permit Number:** 169-32249-00035  
**Pit ID:** 169-00035  
**Reviewer:** Bruce Farrar  
**Date:** August 24, 2012

**Baghouse MB2, serving the Milling Operation Stage #2 Processing Area and the Raw Material Unloading Area (RMUA)**

Control Device	Vent ID	Outlet Grain Loading	Flow Rate	Control Efficiency	Number of Units	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5 PTE	
		(gr/acfm)	(cfm)	(%)		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Baghouse MB2	S-MB2	0.0125	40000	99.75%	1	1714.29	7508.57	4.286	18.77
<b>Total PTE:</b>						<b>7508.57</b>		<b>18.77</b>	

Limited PM/PM10/PM2.5 PTE	
(lb/hr)	(ton/yr)
8.09	35.43

**Notes:**

Flow rate of 40000 cfm and control efficiency of 99.75% were provided by source.

Grain loading emission rate provided by source and based on information provided by baghouse manufacturer and process knowledge.

Although there are several emission points in Milling Operation Stage #2 (described below), they are controlled by one baghouse. Calculations are based on grain loading from the baghouse; therefore, the number of units is one (1).

Metal HAPs from this baghouse are shown in a separate worksheet.

**Methodology:**

Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)

Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)

Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/acfm) \* Flow Rate (cfm) \* 60 minutes / 1 hr \* 1lb / 7000 gr \* Number of Units

Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) \* 8760 hrs / 2000 lbs

**Milling Operation Stage #2 Processing Area includes:**

- Mega Slam, MS
- Mega Slam Shaker Table/Grizzly, ST2
- Midwest Screen, SS1
- Screw Conveyors, SC7 through SC12
- Belt Conveyors, BC1, BC3, BC4, and BC5

**Raw Material Unloading Area (RMUA) includes:**

- Raw Material Unloading Bays (1 through 13)

**Appendix A: Emissions Calculations  
Secondary Aluminum Operations**

**Company Name:** Aleris Recycling, Inc.  
**Address City IN Zip:** 305 Dimension Avenue, Wabash, Indiana 46992  
**Permit Number:** 169-32249-00035  
**Pit ID:** 169-00035  
**Reviewer:** Bruce Farrar  
**Date:** August 24, 2012

**Baghouse MB3, serving the Milling Operation Stage #3 Processing Area**

Control Device	Vent ID	Outlet Grain Loading	Flow Rate	Control Efficiency	Number of Units	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5 PTE	
		(gr/acfm)	(cfm)	(%)		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Baghouse MB3	S-MB3	0.0125	40000	99.75%	1	1714.29	7508.57	4.286	18.77
<b>Total PTE:</b>						<b>7508.57</b>		<b>18.77</b>	

Limited PM/PM10/PM2.5 PTE	
(lb/hr)	(ton/yr)
4.75	20.79

**Notes:**

Flow rate of 40000 cfm and control efficiency of 99.75% were provided by source.

Grain loading emission rate provided by source and based on information provided by baghouse manufacturer and process knowledge.

Although there are several emission points in Milling Operation Stage #3 (described below), they are controlled by one baghouse. Calculations are based on grain loading from the baghouse; therefore, the number of units is one (1).

Metal HAPs from this baghouse are shown in a separate worksheet.

**Methodology:**

Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)

Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)

Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/acfm) \* Flow Rate (cfm) \* 60 minutes / 1 hr \* 1lb / 7000 gr \* Number of Units

Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) \* 8760 hrs / 2000 lbs

**Milling Operation Stage #3 Processing Area includes:**

- Cage Mill, CM
- Midwest Screen, SS2
- Screw Conveyors, SC13 through SC22
- Belt Conveyors, BC6 through BC9
- Tank Discharge Vibratory Feeders, PF1, PF2, and PF3

**Appendix A: Emission Calculations  
Fugitive Dust Emissions - Paved Roads**

**Company Name:** Aleris Recycling, Inc.  
**Source Address:** 305 Dimension Avenue, Wabash, Indiana 46992  
**Permit Number:** 169-32249-00035  
**Reviewer:** 169-00035  
**Date:** Bruce Farrar  
**August 24, 2012**

**Paved Roads at Industrial Site**

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	32.0	1.0	32.0	38.5	1232.0	792	0.150	4.8	1752.0
Vehicle (leaving plant) (one-way trip)	32.0	1.0	32.0	5.0	160.0	792	0.150	4.8	1752.0
<b>Totals</b>			<b>64.0</b>		<b>1392.0</b>			<b>9.6</b>	<b>3504.0</b>

Average Vehicle Weight Per Trip =  $\frac{27.25}{0.30}$  tons/trip  
Average Miles Per Trip =  $\frac{0.30}{0.30}$  miles/trip

Unmitigated Emission Factor, Ef =  $[k * (sL)^{0.91} * (W)^{1.02}]$  (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	27.3	27.3	27.3	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m <sup>2</sup> = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext =  $E * [1 - (p/4N)]$  (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, Eext =  $E_f * [1 - (p/4N)]$   
where p =  $\frac{125}{365}$  days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)  
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.532	0.506	0.1243	lb/mile
Mitigated Emission Factor, Eext =	2.315	0.463	0.1136	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	2.22	0.44	0.11	2.03	0.41	0.10	1.01	0.20	0.05
Vehicle (leaving plant) (one-way trip)	2.22	0.44	0.11	2.03	0.41	0.10	1.01	0.20	0.05
<b>Totals</b>	<b>4.44</b>	<b>0.89</b>	<b>0.22</b>	<b>4.06</b>	<b>0.81</b>	<b>0.20</b>	<b>2.03</b>	<b>0.41</b>	<b>0.10</b>

**Methodology**

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] \* [Maximum trips per day (trip/day)]  
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]  
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] \* [Maximum one-way distance (mi/trip)]  
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]  
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]  
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Unmitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] \* [Mitigated Emission Factor (lb/mile)] \* (ton/2000 lbs)  
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] \* [1 - Dust Control Efficiency]

**Abbreviations**

PM = Particulate Matter  
PM10 = Particulate Matter (<10 um)  
PM2.5 = Particle Matter (<2.5 um)  
PTE = Potential to Emit

**Appendix A: Emissions Calculations  
Secondary Aluminum Operations**

**Company Name: Aleris Recycling, Inc.  
Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992  
Permit Number: 169-32249-00035  
Plt ID: 169-00035  
Reviewer: Bruce Farrar  
Date: August 24, 2012**

HAPs Emissions from Milling Processes			Emissions (tpy)						Controlled
Emission Unit	Uncontrolled PM (tpy)	Alloy Concentration	Cadmium	Chromium	Lead	Manganese	Nickel	Total HAPs	Total HAPs
Factor		at 5% of PM (tpy)	1.00E-06	5.02E-04	7.30E-04	2.12E-03	1.02E-03	(tpy)	(tpy)
Baghouse MB2	7508.57	375.43	3.75E-04	1.88E-01	2.74E-01	7.96E-01	3.83E-01	1.64E+00	4.10E-03
Baghouse MB3	7508.57	375.43	3.75E-04	1.88E-01	2.74E-01	7.96E-01	3.83E-01	1.64E+00	4.10E-03
Baghouse MB4	7508.57	375.43	3.75E-04	1.88E-01	2.74E-01	7.96E-01	3.83E-01	1.64E+00	4.10E-03
TOTALS	22,525.71	1126.29	1.13E-03	5.65E-01	8.22E-01	<b>2.39E+00</b>	1.15E+00	<b>4.93E+00</b>	1.23E-02

Methodology:

- Uncontrolled particulate from grain loading (separate worksheet) for each baghouse.
- Alloy concentration obtained from source, based on data gathered at source of 2% to 5% range. Worst case of 5% was used.
  
- Factors for top five metal HAPs provided by source, and were average concentrations for each metal, and was obtained from SARA/TRI data for reporting year 2010.

Alloy concentration (tpy) = Uncontrolled PM (tpy) \* 5%

Cadmium emissions (tpy) = cadmium concentration \* total alloy concentration

Same calculation methodology for the metal HAPs of chromium, lead, manganese, and nickel.

Controlled HAPs based on Controlled PM from Baghouse worksheets. = Controlled PM \* Alloy concentration \* Total HAPs

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Company Name: Aleris Recycling, Inc.**  
**Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992**  
**Permit Number: 169-32249-00035**  
**Plt ID: 169-00035**  
**Reviewer: Bruce Farrar**  
**Date: August 24, 2012**

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
3.4	1020	29.5

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx 100 **see below	VOC	CO
Potential Emission in tons/yr	0.03	0.11	0.11	0.01	1.48	0.08	1.24

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
 PM2.5 emission factor is filterable and condensable PM2.5 combined.  
 \*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.  
 MMBtu = 1,000,000 Btu  
 MMCF = 1,000,000 Cubic Feet of Gas  
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03  
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 8 for HAPs emissions calculations.

**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****HAPs Emissions****Company Name: Aleris Recycling, Inc.****Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992****Permit Number: 169-32249-00035****Pit ID: 169-00035****Reviewer: Bruce Farrar****Date: August 24, 2012**

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	3.098E-05	1.770E-05	1.106E-03	2.655E-02	5.015E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	7.375E-06	1.623E-05	2.065E-05	5.605E-06	3.098E-05

Methodology is the same as page 7.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See Page 9 for Greenhouse Gas calculations.

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Greenhouse Gas Emissions**

**Company Name: Aleris Recycling, Inc.**  
**Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992**  
**Permit Number: 169-32249-00035**  
**Pit ID: 169-00035**  
**Reviewer: Bruce Farrar**  
**Date: August 24, 2012**

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2 120,000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	1,770	0.03	0.03
Summed Potential Emissions in tons/yr	1,770		
CO2e Total in tons/yr	1,781		

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations  
Front-end Loading**

**Company Name:** Aleris Recycling, Inc.  
**Address City IN Zip:** 305 Dimension Avenue, Wabash, Indiana 46992  
**Permit Number:** 169-32249-00035  
**Plt ID:** 169-00035  
**Reviewer:** Bruce Farrar  
**Date:** August 24, 2012

**Batch or Continuous Drop Operations (AP-42 Section 13.2.4)**

To estimate potential fugitive dust emissions from processing and handling of raw materials (batch or continuous drop operations), AP-42 emission factors for Aggregate Handling, Section 13.2.4 (fifth edition, 1/95) are utilized.

$$E_f = k \cdot (0.0032)^M \cdot \left[ \frac{U}{5} \right]^{1.3} / (M/2)^{1.4}$$

where:  $E_f$  = Emission factor (lb/ton)

$k$  (PM) = 0.74 = particle size multiplier (0.74 assumed for aerodynamic diameter  $\leq 100$   $\mu$ m)  
 $k$  (PM10) = 0.35 = particle size multiplier (0.35 assumed for aerodynamic diameter  $\leq 10$   $\mu$ m)  
 $k$  (PM2.5) = 0.053 = particle size multiplier (0.053 assumed for aerodynamic diameter  $\leq 2.5$   $\mu$ m)  
 $U$  = 10 = worst case annual mean wind speed (Source: NOAA, 2006\*)  
 $M$  = 5.0 = material % moisture content of aggregate (Source: AP-42 Section 11.1.1.1)  
 $E_f$  (PM) = 1.62E-03 lb PM/ton of material handled  
 $E_f$  (PM10) = 7.65E-04 lb PM10/ton of material handled  
 $E_f$  (PM2.5) = 1.16E-04 lb PM2.5/ton of material handled

Maximum Material Handling Throughput = 40 tons/Hr

Type of Activity	Unlimited/Uncontrolled PTE of PM (tons/yr)	Unlimited/Uncontrolled PTE of PM10 (tons/yr)	Unlimited/Uncontrolled PTE of PM2.5 (tons/yr)
Front-end loader dumping of materials into trucks	0.28	0.13	0.02
<b>Total (tons/yr)</b>	<b>0.28</b>	<b>0.13</b>	<b>0.02</b>

**Methodology**

Unlimited Potential to Emit (tons/yr) = (Maximum Material Handling Throughput (tons/hr)) \* (Emission Factor (lb/ton)) \* (8760 hrs/yr) \* (ton/2000 lbs)  
 \*Worst case annual mean wind speed (Indianapolis, IN) from "Comparative Climatic Data", National Climatic Data Center, NOAA, 2006

**Abbreviations**

PM = Particulate Matter  
 PM10 = Particulate Matter (<10  $\mu$ m)  
 PM2.5 = Particulate matter (< 2.5  $\mu$ m)  
 PTE = Potential to Emit

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Company Name: Aleris Recycling, Inc.**  
**Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992**  
**Permit Number: 169-32249-00035**  
**Plt ID: 169-00035**  
**Reviewer: Bruce Farrar**  
**Date: August 24, 2012**

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
1.5	1020	12.9

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.01	0.05	0.05	3.86E-03	0.64	0.04	0.54

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

PM2.5 emission factor is filterable and condensable PM2.5 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 12 for HAPs emissions calculations.

**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****HAPs Emissions****Company Name: Aleris Recycling, Inc.****Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992****Permit Number: 169-32249-00035****Pit ID: 169-00035****Reviewer: Bruce Farrar****Date: August 24, 2012**

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.353E-05	7.729E-06	4.831E-04	1.159E-02	2.190E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.221E-06	7.085E-06	9.018E-06	2.448E-06	1.353E-05

Methodology is the same as page 7.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See Page 13 for Greenhouse Gas calculations.

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Greenhouse Gas Emissions**

**Company Name: Aleris Recycling, Inc.**

**Address City IN Zip: 305 Dimension Avenue, Wabash, Indiana 46992**

**Permit Number: 169-32249-00035**

**Pit ID: 169-00035**

**Reviewer: Bruce Farrar**

**Date: August 24, 2012**

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	773	0.01	0.01
Summed Potential Emissions in tons/yr	773		
CO2e Total in tons/yr	778		

**Methodology**

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

100 North Senate Avenue  
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(317) 232-8603  
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## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** Archie Haney  
Aleris Recycling, Inc.  
305 Dimension Avenue  
Wabash, IN 46992

**DATE:** September 24, 2012

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
FESOP  
169-32249-00035

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Phillip Brown, Responsible Official  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07

# Mail Code 61-53

IDEM Staff	DPABST 9/20/2012 Aleris Recvcling, Inc. 169-32249-00035 (Final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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1		Archie Haney Aleris Recycling, Inc. 305 Dimension Ave Wabash IN 46992 (Source CAATS) (CONFIRM DELIVERY)										
2		Phillip Brown Plant Mgr Aleris Recycling, Inc. 305 Dimension Ave Wabash IN 46992 (RO CAATS)										
3		Ms. Lamonie Silvers 30056 South 100 West Wabash IN 46992 (Affected Party)										
4		Ms. Lynn A. Yohe 63 East Hill Street Wabash IN 46992 (Affected Party)										
5		Mr. Larry C. Thrush One North Wabash Wabash IN 46992 (Affected Party)										
6		Mr. Jerry M. Ault 3441 South 100 west Wabash IN 46992 (Affected Party)										
7		Mr. John Forrester 1400 S. Wabash St Wabash IN 46992 (Affected Party)										
8		Mr. William E. Hunter 55 West Market Wabash IN 46992 (Affected Party)										
9		Mr. Donald R. Mertz 99 West Canal Street Wabash IN 46992 (Affected Party)										
10		Mr. Michael W. Elward 1300 South Wabash Street Wabash IN 46992 (Affected Party)										
11		Wabash County Commissioners 1 West Hill Street Wabash IN 46992 (Local Official)										
12		Wabash City Council and Mayors Office 202 South Wabash Street Wabash IN 46992 (Local Official)										
13		Wabash County Health Department 89 W. Hill, Memorial Hall Wabash IN 46992-3184 (Health Department)										
14		Ted Little Wabash County Council 1076 West 900 North North Manchester IN 46962 (Affected Party)										
15												

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