



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: October 11, 2005
RE: Citation Corporation / 033-19703-00016
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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 IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) days of 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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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.



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Citation Corporation
600 West Main Street
Butler, Indiana 46721**

(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. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T033-17659-00016	
Original signed by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: August 6, 2004 Expiration Date: August 6, 2009
First Significant Permit Modification No. 033-19703- Pages affected: 3, 4, 5, 19, 28 – end of permit 00016	
Issued by: Origin signed by Paul Dubenetzky, Chief Permits Branch Office of Air Quality	Issuance Date: October 11, 2005

Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

C.12 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

C.14 Compliance Response Plan - Preparation, Implementation, Records, and Reports
[326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
[326 IAC 2-6]

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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 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and a stationary aluminum foundry and die casting operation plant.

Responsible Official:	General Manager
Source Address:	600 West Main Street, Butler, Indiana 46721
Mailing Address:	P.O. Box 80, Butler, Indiana 46721
General Source Phone Number:	(260)868-2168
SIC Code:	3365, 3363, 3341
County Location:	Dekalb
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 3.83 tons of aluminum per hour, installed in August 2002, equipped with four (4) natural gas fired burners rated at 9.2 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 3.28 tons of aluminum per hour, installed in August 2002, equipped with three (3) natural gas fired burners rated at 7.86 MMBtu per hour total, exhausting through one (1) stack identified as E-2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 6.0 tons of aluminum per hour, installed in July 2003, equipped with two (2) natural gas fired burners rated at 24.0 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1974, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1976, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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 D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 3.83 tons of aluminum per hour, installed in August 2002, equipped with four (4) natural gas fired burners rated at 9.2 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 3.28 tons of aluminum per hour, installed in August 2002, equipped with three (3) natural gas fired burners rated at 7.86 MMBtu per hour total, exhausting through one (1) stack identified as E-2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 6.0 tons of aluminum per hour, installed in July 2003, equipped with two (2) natural gas fired burners rated at 24.0 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1974, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1976, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1978, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.
- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, installed in 1982, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, installed in 1993, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, installed 1994, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, installed 1995, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, installed 1996, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) reverberatory melt furnace identified as A12 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E-12.
- (m) One (1) reverberatory melt furnace identified as A13 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 MMBtu per hour total, exhausting through one (1) stack identified as E-13.
- (n) The maximum solid reactive flux injection rate at each of reverberatory furnaces A1 through A13 is ten (10) pounds of flux per 10,000 pounds of aluminum melted.
- (o) Source aluminum casting operations:
 - (1) Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (2) Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (3) Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (4) Holding furnaces used in source casting operations, each exhausting inside the building except as indicated, and including:
 - (A) Twenty-seven (27) "basic holding furnaces", including:
 - (i) Two (2) natural gas-fired holding furnaces identified as S1 and S2, each with a maximum heat input rating of 5.8 MMBtu per hour and a nominal holding capacity of 5,000 pounds molten metal, exhausting through one (1) common stack. Each furnace performs degassing as needed using argon or nitrogen;
 - (ii) One (1) natural gas-fired holding furnace identified as H1 with a maximum heat input rating of 1.48 MMBtu per hour and a nominal holding capacity of 7,000 pounds molten metal. This furnace performs degassing as needed using argon or nitrogen;

- (iii) Four (4) natural gas-fired holding furnaces respectively identified as Pots 1A, 1B, 8 and 9, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal. Each furnace performs degassing as needed using argon or nitrogen;
 - (iv) Two (2) natural gas-fired holding furnaces respectively identified as Pots 44 and 45, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment;
 - (v) Two (2) natural gas-fired holding furnaces respectively identified as Pots 46 and 47, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal, performing no additional degassing or rotofluxing;
 - (vi) Six (6) natural gas-fired holding furnaces respectively identified as Pots 17 through 20, 30 and 31, each with a total maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,500 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment; and
 - (vii) Ten (10) electric holding furnaces respectively identified as Pots 34 through 43, each with a nominal holding capacity of 2,000 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment.
- (B) Three (3) "special holding furnaces" as follows:
- (i) One (1) electric holding furnace, identified as SP1, with a total nominal holding capacity of 7,000 pounds molten metal and consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot. The furnace performs degassing as needed using argon or nitrogen; and
 - (ii) Two (2) electric holding furnaces, identified as SP2 and SP3, each with a nominal holding capacity of 14,000 pounds molten metal and each consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot. Each furnace performs degassing as needed using argon or nitrogen.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to Significant Permit Revision No. 033-17746, issued on January 14, 2004, and revised by this Title V permit, the source shall limit the total aluminum production in reverberatory melt furnaces A1 through A13 as follows:

- (a) The total aluminum produced in reverberatory furnaces A2, A3, A4, A6, A7, A8, A10, A11, and A12 shall not exceed 28,910.3 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month, based on the following:
 - (1) PM emissions from each furnace shall not exceed 4.3 pounds of PM emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle; and
 - (2) PM-10 emissions from each furnace shall not exceed 2.6 pounds of PM-10 emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle.

This material usage limit is equivalent to limiting PM and PM10 emissions to 62.16 and 37.58 tons per year, respectively.

- (b) The total aluminum produced in reverberatory furnaces A1, A5, A9, and A13 shall not exceed 16,072.5 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month, based on the following:
- (1) PM emissions from each furnace shall not exceed 3.0 pounds of PM emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle; and
 - (2) PM-10 emissions from each furnace shall not exceed 2.6 pounds of PM-10 emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle.

This material usage limit is equivalent to limiting PM and PM10 emissions to 24.11 and 20.89 tons per year, respectively.

These usage limits are required to limit the source-wide potential to emit both PM and PM-10 to less than 250 tons per twelve (12) consecutive month period. Compliance with this condition shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]

Pursuant to Significant Permit Revision No. 033-16754, issued on June 24, 2003, the Permittee shall limit flux usage as follows:

- (a) For chlorine-based fluxing:
- (1) The total hexachloroethane input usage at the source, including all reverberatory and holding furnaces, shall not exceed 21,645 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
 - (2) Hydrochloric acid (HCl) emissions from each furnace shall not exceed 0.924 pounds of HCl emitted per pound of hexachloroethane used.

This material usage limit is equivalent to limiting single HAP (as HCl) emissions to less than 10 tons per year.

- (b) For fluorine-based fluxing:
- (1) The total SF-350 type flux input usage at the source, including all reverberatory and holding furnaces, shall not exceed 82,425 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
 - (2) Hydrogen fluoride (HF) emissions from each furnace shall not exceed 0.2276 pounds of HF emitted per pound of flux used.
 - (3) The fluorine content in the flux shall not exceed 21.614 percent (%) by weight.

This material usage limit is equivalent to limiting single HAP (as HF) emissions to less than 10 tons per year.

- (c) These usage limits are required to limit the potential to emit of a single HAP to less than 10 tons per twelve (12) consecutive month period. Compliance with (a) and (b) of this condition shall also limit the source-wide potential to emit combined HAPs to less than 25 tons per 12 consecutive month period. Compliance with this condition shall render the requirements of 326 IAC 2-4.1-1 not applicable to all emission units installed after July 27, 1997.

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as specified when operating at the respective process weight:

Emission Unit/Activity	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)
Reverberatory furnace A1	3.83	10.08
Reverberatory furnace A2	3.28	9.09
Reverberatory furnace A3	6.00	13.62
Reverberatory furnace A4	1.25	4.76
Reverberatory furnace A5	1.25	4.76
Reverberatory furnace A6	1.25	4.76
Reverberatory furnace A7	1.00	4.10
Reverberatory furnace A8	0.25	1.62
Reverberatory furnace A9	2.50	7.58
Reverberatory furnace A10	2.50	7.58
Reverberatory furnace A11	0.90	3.82
Reverberatory furnace A12	3.50	9.49
Reverberatory furnace A13	3.50	9.49
pouring and casting for furnaces A1 through A11 (excludes A3)	18.01	28.44
FLCA pouring and casting for furnace A3	6.00	13.61
ME Cell pouring and casting for furnaces A12 & A13	7.00	15.10

The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 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.1.4 Secondary Aluminum Production Facility NESHAP [40 CFR Part 63, Subpart RRR]

- (a) The Permittee shall only melt clean charge, customer returns, or internal scrap in the aluminum foundry as defined under 40 CFR 63.1503. The Permittee shall not operate sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns. Therefore, the requirements of 40 CFR 63, Subpart RRR do not apply.

- (b) The Permittee shall notify U.S. EPA in writing at least 30 days prior to charging any materials other than clean charge, internal scrap, or customer returns, or operating sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns.
- (c) If the Permittee chooses to change its operations, as described in paragraph (b) above, it will fully comply with the NESHAP General Provisions at 40 CFR 63, Subpart A and the NESHAP for Secondary Aluminum Production at 40 CFR 63, Subpart RRR.
- (d) Any change or modification to this source as described in paragraph (b) above shall also require prior approval from the Office of Air Quality (OAQ) before such change can occur.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to Significant Permit Revision No. 033-17746, issued on January 14, 2004, in order to demonstrate compliance with Conditions D.1.1 and D.1.3, the following shall apply:

- (a) For purposes of PM and PM10 compliance stack testing, the thirteen (13) furnaces at this source are grouped as follows:

Group A:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A8	0.25	2.5 (1 burner)
A11	0.9	15.9 (6 burners, total)
A7	1.0	5.2 (2 burners, total)

Group B:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A4	1.25	10.05 (3 burners, total)
A5	1.25	6.7 (2 burners, total)
A6	1.25	10.05 (3 burners, total)

Group C:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A9	2.5	10.6 (4 burners, total)
A10	2.5	9.0 (6 burners, total)
A2	3.28	9.2 (4 burners, total)
A12	3.5	12.5 (2 burners, total)

Group D:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A13	3.5	12.5 (2 burners, total)
A1	3.83	9.2 (4 burners, total)
A3	6.0	24.2 (2 burners, total)

- (b) The Permittee shall perform PM and PM10 testing on one (1) furnace from each of Groups A, B, C and D by December 31, 2005. The tests shall be conducted during metal melting and metal fluxing utilizing methods as approved by the Commissioner. This test shall be repeated every twenty-one (21) months from the date of the prior valid compliance demonstration, but shall not be repeated on any one (1) furnace in a group until all furnaces in the respective group are tested. The first complete PM/PM10 testing of Groups A, B and C shall not include furnaces A11, A5, A6, A9 and A2.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the reverberatory melt furnaces' exhaust stacks (E-1 through E-13) shall be performed once per shift during normal daylight operations when metal melting and fluxing is occurring and when exhausting to the atmosphere. 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) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Total aluminum produced in furnaces A2, A3, A4, A6, A7, A8, and A10 - A12 for each month; and
 - (3) Total aluminum produced in furnaces A1, A5, A9, and A13 for each month.
- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Total hexachloroethane input usage at the source for each month;
 - (3) Total SF-350 type flux input usage at the source for each month, and weight percent of fluorine in the SF-350 type flux; and
 - (4) The total weight of HCl and HF, each as a single HAP, emitted for each compliance period. This determination shall be based on complete (100%) chemical conversion of chlorine in the hexachloroethane in the flux to HCl emitted, and complete (100%) chemical conversion of fluorine in the flux to HF emitted based on a maximum of 21.614 weight percent fluorine in the flux.

- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of once per shift visible emission notations of the reverberatory melt furnace exhaust stacks.
- (d) To document compliance with Condition D.1.5, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

The following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

Trimmers that do not produce fugitive emissions and that are equipped with a dust collection trim material recovery device such as a bag filter or cyclone, including:

- (a) two (2) sawing and trimming operations for furnaces A1 through A13, excluding A3, individually identified as C-1 and C-2, installed in 1964, processing up to a total of 3.8 tons aluminum per hour; and
- (b) sawing and trimming operation for furnace A3, installed in 2003, processing up to 3.0 tons aluminum per hour,

utilizing two (2) cyclones for particulate matter control each exhausting through one (1) stack respectively identified as E-14 and E-15. [326 IAC 6-3-2]

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sawing and trimming operations identified as C-1 and C-2 shall not exceed 10.0 pounds per hour when operating at a process weight rate of 3.8 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sawing and trimming operation for furnace A3 shall not exceed 8.6 pounds per hour when operating at a process weight rate of 3.0 tons per hour.

The pounds per hour allowable particulate emission rates were calculated with the following equation:

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

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

Compliance Determination Requirements

D.2.2 Particulate Control

In order to comply with condition D.2.1, the cyclones for particulate control shall be in operation and control emissions from the saw/trim facilities at all times that these facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific compliance monitoring requirements applicable to these facilities.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Citation Corporation
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
Part 70 Permit No.: T033-17659-00016

**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:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Citation Corporation
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
Part 70 Permit No.: T033-17659-00016

This form consists of 2 pages

Page 1 of 2

- This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - C The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), 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
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , 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: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Citation Corporation
 Source Address: 600 West Main Street, Butler, IN 46721
 Mailing Address: P.O. Box 80, Butler, IN 46721
 Part 70 No.: T033-17659-00016
 Facility: Reverberatory melt furnaces A1 through A13
 Parameter: Aluminum produced
 Limit (a) total aluminum produced in reverberatory furnaces A2, A3, A4, A6, A7, A8, A10, A11, and A12 shall not exceed 28,910.3 tons per 12 consecutive month period with compliance determined at the end of each month
 (b) total aluminum produced in reverberatory furnaces A1, A5, A9, and A13 shall not exceed 16,072.5 tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Aluminum Produced This Month (tons)		Aluminum Produced Previous 11 Months (tons)		12 Month Aluminum Produced (tons)	
	A2, A3, A4, A6, A7, A8, A10, A11, A12(total)	A1, A5, A9, A13 (total)	A2, A3, A4, A6, A7, A8, A10, A11, A12(total)	A1, A5, A9, A13 (total)	A2, A3, A4, A6, A7, A8, A10, A11, A12(total)	A1, A5, A9, A13 (total)
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Citation Corporation
 Source Address: 600 West Main Street, Butler, IN 46721
 Mailing Address: P.O. Box 80, Butler, IN 46721
 Part 70 No.: T033-17659-00016
 Facility: Entire source
 Parameter: Hexachloroethane input usage in the chlorine-based fluxing process; and SF-350 type flux input usage in the fluorine-based fluxing process
 Limit: (a) For chlorine-based fluxing:
 total hexachloroethane input usage at the source, including all reverberatory and holding furnaces, shall not exceed 21,645 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month
 (b) For fluorine-based fluxing:
 total SF-350 type flux input usage at the source, including all reverberatory and holding furnaces, shall not exceed 82,425 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month

YEAR: _____

Month	Input Usage at Source This Month (tons)		Input Usage at Source Previous 11 Months (tons)		12 Month Input Usage at Source (tons)	
	hexachloroethane	SF-350 flux	hexachloroethane	SF-350 flux	hexachloroethane	SF-350 flux
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.
 9 Deviation/s occurred in this quarter.
 Deviation has been reported on: _____

Submitted by: _____
 Title / Position: _____
 Signature: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Citation Corporation
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
Part 70 No.: T033-17659-00016

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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>	
<p><input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.</p>	
<p><input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	
<p>Permit Requirement (specify permit condition #)</p>	
<p>Date of Deviation:</p>	<p>Duration of Deviation:</p>
<p>Number of Deviations:</p>	
<p>Probable Cause of Deviation:</p>	
<p>Response Steps Taken:</p>	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Significant Permit Modification to
a Part 70 Operating Permit**

Source Background and Description

Source Name:	Citation Corporation
Source Location:	600 West Main Street, Butler, Indiana, 46721
County:	Dekalb
SIC Code:	3365,3363,3341
Operation Permit No.:	T033-17659-00016
Operation Permit Issuance Date:	August 6, 2004
Permit Modification No.:	033-19703-00016
Permit Reviewer:	Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Citation Corporation relating to the operation of a stationary aluminum foundry and die casting plant.

History

On October 6, 2004, Citation Corporation submitted an application to the OAQ requesting to change the record keeping requirements in the Part 70 permit to address a Finding of Violation that was issued to Citation Corporation on September 24, 2004 by the U.S. EPA for violating the National Emission Standards for Hazardous Air Pollutants (NESHAP) General Provisions at 40 CFR 63, Subpart A and the NESHAP for Secondary Aluminum Production at 40 CFR 63, Subpart RRR. Subsequent to this request, the source was issued an Administrative Consent Order on March 31, 2005 by the U.S. EPA wherein Citation Corporation certified that the only materials its Butler, Indiana facility melts are clean charge, customer returns, or internal scrap as defined in 40 CFR 63.1503 and it does not operate sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns. Therefore, since the source no longer meets the definition of a secondary aluminum production facility as defined in 40 CFR 63.1503, the requirements of the NESHAP, Subpart RRR will be removed from the Part 70 permit. Citation Corporation was issued a Part 70 permit on August 6, 2004.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 3.83 tons of aluminum per hour, installed in August 2002, equipped with four (4) natural gas fired burners rated at 9.2 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 3.28 tons of aluminum per hour, installed in August 2002, equipped with three (3) natural gas fired burners rated at 7.86 MMBtu per hour total, exhausting through one (1) stack identified as E-2.

- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 6.0 tons of aluminum per hour, installed in July 2003, equipped with two (2) natural gas fired burners rated at 24.0 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1974, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1976, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1978, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.
- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, installed in 1982, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, installed in 1993, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, installed 1994, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, installed 1995, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, installed 1996, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) reverberatory melt furnace identified as A12 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E-12.
- (m) One (1) reverberatory melt furnace identified as A13 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 MMBtu per hour total, exhausting through one (1) stack identified as E-13.
- (n) The maximum solid reactive flux injection rate at each of reverberatory furnaces A1 through A13 is ten (10) pounds of flux per 10,000 pounds of aluminum melted.
- (o) Source aluminum casting operations, including:

- (1) Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
- (2) Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
- (3) Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
- (4) Holding furnaces used in source casting operations, performing additional molten metal degassing and/or rotofluxing as indicated, each exhausting inside the building except as indicated, including:
 - (A) Twenty-seven (27) "basic holding furnaces", including:
 - (i) Two (2) natural gas-fired holding furnaces identified as S1 and S2, each with a maximum heat input rating of 5.8 MMBtu per hour and a nominal holding capacity of 5,000 pounds molten metal, exhausting through one (1) common stack. Each furnace performs degassing as needed using argon or nitrogen;
 - (ii) One (1) natural gas-fired holding furnace identified as H1 with a maximum heat input rating of 1.48 MMBtu per hour and a nominal holding capacity of 7,000 pounds molten metal. This furnace performs degassing as needed using argon or nitrogen;
 - (iii) Four (4) natural gas-fired holding furnaces respectively identified as Pots 1A, 1B, 8 and 9, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal. Each furnace performs degassing as needed using argon or nitrogen;
 - (iv) Two (2) natural gas-fired holding furnaces respectively identified as Pots 44 and 45, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment;
 - (v) Two (2) natural gas-fired holding furnaces respectively identified as Pots 46 and 47, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal, performing no additional degassing or rotofluxing;
 - (vi) Six (6) natural gas-fired holding furnaces respectively identified as Pots 17 through 20, 30 and 31, each with a total maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,500 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment; and

- (vii) Ten (10) electric holding furnaces respectively identified as Pots 34 through 43, each with a nominal holding capacity of 2,000 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment.
- (B) Three (3) "special holding furnaces" as follows:
 - (i) One (1) electric holding furnace, identified as SP1, with a total nominal holding capacity of 7,000 pounds molten metal and consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot. The furnace performs degassing as needed using argon or nitrogen; and
 - (ii) Two (2) electric holding furnaces, identified as SP2 and SP3, each with a nominal holding capacity of 14,000 pounds molten metal and each consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot. Each furnace performs degassing as needed using argon or nitrogen.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source was issued a Part 70 Operating Permit (T033-17659-00016) on August 6, 2004. The source has not received any approvals since then.

Enforcement Issue

There are no enforcement actions pending.

An Administrative Consent Order (EPA-5-05-113(a)IN-07) was issued to Citation Corporation on March 31, 2005 wherein Citation Corporation certified that the only materials its Butler, Indiana facility melts are clean charge, customer returns, or internal scrap as defined in 40 CFR 63.1503 and it does not operate sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns. The Administrative Consent Order was issued as a result of the Finding of Violation (EPA-05-04-33-IN) that was issued to Citation Corporation on September 24, 2004 for violating the NESHAP General Provisions at 40 CFR 63, Subpart A and the NESHAP for Secondary Aluminum Production at 40 CFR 63, Subpart RRR.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 6, 2004. Additional information was received on November 24, 2004 and July 7, 2005.

Emission Calculations

There have been no changes to the emission calculations for this source as a result of this modification, therefore, there are no emission calculations included.

Justification for Modification

The Title V permit is being modified through a Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(d) because it involves significant changes to existing monitoring, reporting and record keeping requirements in the Part 70 permit.

County Attainment Status

The source is located in Dekalb County.

Pollutant	Status
PM-10	Attainment
PM-2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are considered when evaluating the rule applicability relating to ozone. Dekalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Dekalb County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.
- (c) Dekalb County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	<100
PM-10	<100
SO ₂	0.9
VOC	7.9
CO	57.5
NOx	68.4

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon Part 70 Operating Permit (T033-17659-00016), issued on August 6, 2004.

Potential to Emit of the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

The source was issued a Part 70 Operating Permit on August 6, 2004. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
metal production at furnaces A1-A13	<86.27 ⁽¹⁾	58.48 ⁽¹⁾	0.0	0.9	0.0	0.0	<10 (single) ⁽²⁾ 22.1 (total)
metal pouring/casting and sawing/trimming of metal castings	12.4	12.4	0.5	3.2	0.0	0.2	0.0
natural gas combustion as insignificant activity	1.3	5.2	0.4	3.8	57.5	68.4	1.2 (single) 1.3 (total)
Total Potential to Emit	<100	<100	0.9	7.9	57.5	68.4	<10 (single) ⁽²⁾ <25 (total)

1. Based on Condition D.1.1 of the Part 70 operating permit.
 2. Based on Condition D.1.2 of the Part 70 operating permit.

This modification to an existing minor stationary source is not major because there is no emission increase. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this modification.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63.1500 through 63.1519, Subpart RRR, are being removed from the Part 70 permit in this modification. Pursuant to 40 CFR 63.1500 (d), the requirements of this subpart do not apply to manufacturers of aluminum die castings, aluminum foundries, or aluminum extruders that melt no materials other than clean charge and materials generated within the facility; and that also do not operate a thermal chip dryer, sweat furnace or scrap dryer/delacquering kiln/decoating kiln. An Administrative Consent Order (EPA-5-05-113(a)IN-07) was issued to Citation Corporation on March 31, 2005 wherein Citation Corporation certified that the only materials its Butler, Indiana facility melts are clean charge, customer returns, or internal scrap as defined in 40 CFR 63.1503 and it does not operate sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns. Therefore, this source no longer meets the definition of a secondary aluminum production facility as defined in 40 CFR 63.1503, and the requirements of the NESHAP, Subpart RRR will be removed from the Part 70 permit. In the Administrative Consent Order, Citation also certified that it will notify U.S. EPA in writing at least 30 days prior to charging any materials other than clean charge, internal scrap, or customer returns, or operating sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns. Citation also certified that if it chooses to change its operations, as described in the previous sentence, it will fully comply with the NESHAP General Provisions at 40 CFR 63, Subpart A and the NESHAP for Secondary Aluminum Production at 40 CFR 63, Subpart RRR.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This existing minor stationary source was initially constructed on or before 1974, prior to the August 7, 1977 rule applicability date. On December 4, 1998, U.S. EPA issued a memorandum clarifying that die casting operations are not considered as secondary aluminum production plants for purposes of PSD, provided two (2) criteria are met. These criteria include plant use of a feedstock that is of a specified alloy and purity (e.g., ingots) or scrap of a specified quality for which little fluxing or alloying is required; and the plant cannot produce intermediate forms of feedstock for sale or use by other sources. The Citation Butler plant previously did not use clean charge as their sole reverberatory furnace feedstock and, therefore, the plant die casting operation was considered a secondary metal production plant. However, an Administrative Consent Order (EPA-5-05-113(a)IN-07) was issued to Citation Corporation on March 31, 2005 wherein Citation Corporation certified that the only materials its Butler, Indiana facility melts are clean charge, customer returns, or internal scrap. Therefore, since the source now only uses clean charge in the reverberatory furnaces, this source is no longer considered 1 of the 28 listed source categories under 326 IAC 2-2. The major source threshold is now 250 tons per year of any criteria pollutant. This source has limited its metal production such that the potential to emit of any criteria pollutant, including PM and PM10, is less than 100 tons per year after enforceable controls and limitations making it a minor stationary source. Although the major source threshold is now 250 tons per year, the Permittee has opted to retain the source-wide metal production limit such that the PTE of PM and PM10 is less than 100 tons per year. This source shall continue to be a minor stationary source and, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE of 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The source previously accepted limits on chlorine-based flux usage and fluorine-based flux usage to limit the source-wide potential to emit of a single HAP to less than 10 tons per year and the source-wide potential to emit of any combination of HAPs to less than 25 tons per year. Although this limit included units installed prior to the July 27, 1997 applicability date of this rule, it also included units installed after the July 27, 1997 rule applicability date. HAP limits are required for the units installed after July 27, 1997 in order to render the requirements of this rule not applicable to those units. Since the source can not accurately track flux usages in each individual furnace, they have opted to retain the existing source-wide HAP emission limits in the Part 70 permit.

There are no changes to any other existing applicability determinations of state rules as determined in Part 70 Operating Permit (T033-17659-00016), issued on August 6, 2004.

There are no new state rules applicable to this permit modification, as the changes presented herein do not involve construction of new emission units, nor the modification or reconstruction of an existing emissions unit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no new compliance monitoring requirements applicable to this source as a result of this modification.

Changes Proposed

The changes listed below have been made to the Part 70 Operating Permit (T033-17659-00016).

1. The letterhead for the Part 70 Permit has been revised to reflect the name of the new Governor of Indiana and the new Commissioner of IDEM. The P.O. Box and the zip code on the cover page have been revised as well.
2. Section A.1 of the Part 70 Permit has been revised to state that this source is not one of the 28 listed source categories under 326 IAC 2-2 (PSD) as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and a stationary secondary aluminum foundry and die casting operation plant.

Responsible Official:	General Manager
Source Address:	600 West Main Street, Butler, Indiana 46721
Mailing Address:	P.O. Box 80, Butler, Indiana 46721
General Source Phone Number:	(260)868-2168
SIC Code:	3365, 3363, 3341
County Location:	Dekalb
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

3. Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule is effective March 16, 2005; therefore, the condition reflecting this rule has been revised in the permit as follows:

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] **[326 IAC 1-1-6]**

~~Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.~~ **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.**

4. Conditions D.1.4, D.1.6, D.1.7, D.1.8, D.1.9, D.1.12, D.1.13, D.1.14, D.1.16, D.1.17, D.1.18, D.1.19, D.1.21 and D.1.22 have been removed from the Part 70 permit since the requirements of 40 CFR 63, Subpart RRR are no longer included in the permit. Section D.1 is revised as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 3.83 tons of aluminum per hour, installed in August 2002, equipped with four (4) natural gas fired burners rated at 9.2 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 3.28 tons of aluminum per hour, installed in August 2002, equipped with three (3) natural gas fired burners rated at 7.86 MMBtu per hour total, exhausting through one (1) stack identified as E-2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 6.0 tons of aluminum per hour, installed in July 2003, equipped with two (2) natural gas fired burners rated at 24.0 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1974, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1976, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, installed in 1978, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.
- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, installed in 1982, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.

- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, installed in 1993, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, installed 1994, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, installed 1995, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, installed 1996, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) reverberatory melt furnace identified as A12 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E-12.
- (m) One (1) reverberatory melt furnace identified as A13 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 MMBtu per hour total, exhausting through one (1) stack identified as E-13.
- (n) The maximum solid reactive flux injection rate at each of reverberatory furnaces A1 through A13 is ten (10) pounds of flux per 10,000 pounds of aluminum melted.
- (o) Source aluminum casting operations:
 - (1) Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (2) Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (3) Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (4) Holding furnaces used in source casting operations, each exhausting inside the building except as indicated, and including:
 - (A) Twenty-seven (27) "basic holding furnaces", including:
 - (i) Two (2) natural gas-fired holding furnaces identified as S1 and S2, each with a maximum heat input rating of 5.8 MMBtu per hour and a nominal holding capacity of 5,000 pounds molten metal, exhausting through one (1) common stack. Each furnace performs degassing as needed using argon or nitrogen;
 - (ii) One (1) natural gas-fired holding furnace identified as H1 with a maximum heat input rating of 1.48 MMBtu per hour and a nominal holding capacity of 7,000 pounds molten metal. This furnace performs degassing as needed using argon or nitrogen;
 - (iii) Four (4) natural gas-fired holding furnaces respectively identified as Pots 1A, 1B, 8 and 9, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal. Each furnace performs degassing as needed using argon or nitrogen;
 - (iv) Two (2) natural gas-fired holding furnaces respectively identified as Pots 44 and 45, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment;
 - (v) Two (2) natural gas-fired holding furnaces respectively identified as Pots 46 and 47, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal, performing no additional degassing or rotofluxing;
 - (vi) Six (6) natural gas-fired holding furnaces respectively identified as Pots 17 through 20, 30 and 31, each with a total maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,500 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment; and
 - (vii) Ten (10) electric holding furnaces respectively identified as Pots 34 through 43, each with a nominal holding capacity of 2,000 pounds molten metal. As needed, each furnace performs degassing, using argon or nitrogen, and rotofluxing, using up to one (1) pound of solid reactive flux per treatment.
 - (B) Three (3) "special holding furnaces" as follows:
 - (i) One (1) electric holding furnace, identified as SP1, with a total nominal holding capacity of 7,000 pounds molten metal and consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot. The furnace performs

- (ii) degassing as needed using argon or nitrogen; and
Two (2) electric holding furnaces, identified as SP2 and SP3, each with a nominal holding capacity of 14,000 pounds molten metal and each consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot. Each furnace performs degassing as needed using argon or nitrogen.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to Significant Permit Revision No. 033-17746, issued on January 14, 2004, and revised by this Title V permit, the source shall limit the total aluminum production in reverberatory melt furnaces A1 through A13 as follows:

- (a) The total aluminum produced in reverberatory furnaces A2, A3, A4, A6, A7, A8, A10, A11, and A12 shall not exceed 28,910.3 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month, based on the following:
- (1) PM emissions from each furnace shall not exceed 4.3 pounds of PM emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle; and
 - (2) PM-10 emissions from each furnace shall not exceed 2.6 pounds of PM-10 emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle.

This material usage limit is equivalent to limiting PM and PM10 emissions to 62.16 and 37.58 tons per year, respectively.

- (b) The total aluminum produced in reverberatory furnaces A1, A5, A9, and A13 shall not exceed 16,072.5 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month, based on the following:
- (1) PM emissions from each furnace shall not exceed 3.0 pounds of PM emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle; and
 - (2) PM-10 emissions from each furnace shall not exceed 2.6 pounds of PM-10 emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle.

This material usage limit is equivalent to limiting PM and PM10 emissions to 24.11 and 20.89 tons per year, respectively.

These usage limits are required to limit the source-wide potential to emit both PM and PM-10 to less than ~~400~~ 250 tons per twelve (12) consecutive month period. Compliance with this condition shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8][40 CFR 63, Subpart PRR][326 IAC 2-4.1-1]

Pursuant to Significant Permit Revision No. 033-1674554, issued on June 24, 2003, the Permittee shall limit flux usage as follows:

- (a) For chlorine-based fluxing:

- (1) The total hexachloroethane input usage at the source, including all reverberatory and holding furnaces, shall not exceed 21,645 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
- (2) Hydrochloric acid (HCl) emissions from each furnace shall not exceed 0.924 pounds of HCl emitted per pound of hexachloroethane used.

This material usage limit is equivalent to limiting single HAP (as HCl) emissions to less than 10 tons per year.

(b) For fluorine-based fluxing:

- (1) The total SF-350 type flux input usage at the source, including all reverberatory and holding furnaces, shall not exceed 82,425 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
- (2) Hydrogen fluoride (HF) emissions from each furnace shall not exceed 0.2276 pounds of HF emitted per pound of flux used.
- (3) The fluorine content in the flux shall not exceed 21.614 percent (%) by weight.

This material usage limit is equivalent to limiting single HAP (as HF) emissions to less than 10 tons per year.

- (c) These usage limits are required to limit the potential to emit of a single HAP to less than 10 tons per twelve (12) consecutive month period. Compliance with (a) and (b) of this condition shall also limit the source-wide potential to emit combined HAPs to less than 25 tons per 12 consecutive month period. Compliance with this condition shall ~~satisfy the requirements of 326 IAC 2-8-4 and the area source definition of 40 CFR 63, Subpart A~~ **render the requirements of 326 IAC 2-4.1-1 not applicable to all emission units installed after July 27, 1997.**

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as specified when operating at the respective process weight:

Emission Unit/Activity	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (326 IAC 6-3-2) (lb/hr)
Reverberatory furnace A1	3.83	10.08
Reverberatory furnace A2	3.28	9.09
Reverberatory furnace A3	6.00	13.62
Reverberatory furnace A4	1.25	4.76
Reverberatory furnace A5	1.25	4.76
Reverberatory furnace A6	1.25	4.76
Reverberatory furnace A7	1.00	4.10
Reverberatory furnace A8	0.25	1.62
Reverberatory furnace A9	2.50	7.58
Reverberatory furnace A10	2.50	7.58

Reverberatory furnace A11	0.90	3.82
Reverberatory furnace A12	3.50	9.49
Reverberatory furnace A13	3.50	9.49
pouring and casting for furnaces A1 through A11 (excludes A3)	18.01	28.44
FLCA pouring and casting for furnace A3	6.00	13.61
ME Cell pouring and casting for furnaces A12 & A13	7.00	15.10

The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 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.1.4 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]~~

~~The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the thirteen (13) reverberatory furnaces A1 - A13, each as a Group 1 furnace, except when otherwise specified in 40 CFR Part 63, Subpart RRR. These requirements become applicable to the Group 1 furnaces, excluding A3, on March 24, 2003. These requirements become applicable to reverberatory furnace A3 upon startup. Compliance with D.1.2 makes this source an area source under Clean Air Act Section 112. Therefore, only the area source requirements of Subpart RRR apply to these facilities.~~

~~D.1.54 Secondary Aluminum Production Facility NESHAP [40 CFR Part 63, Subpart RRR]~~

~~The thirty (30) holding furnaces at this source are not subject to the requirements of 40 CFR 63, Subpart RRR, National Emission Standards for Hazardous Air Pollutants, for Secondary Aluminum Production. On April 28, 2004, U.S. EPA, Office of Enforcement and Compliance Assurance, issued an applicability determination that concluded that the holding furnaces, which are located at this area source for HAP emissions, and which use only clean charge, are not subject to the requirements of the rule, pursuant to 40 CFR 63.1500(c)(3).~~

~~Any change or modification to this source which may alter this determination for the holding furnaces, including the melting, holding or processing of any material other than clean charge, as defined at 40 CFR Part 63, Subpart RRR, or changing from an area source to a major source of HAP emissions (i.e., elimination of Condition D.1.2), shall require prior approval from the Office of Air Quality (OAQ) before such change can occur.~~

- (a) The Permittee shall only melt clean charge, customer returns, or internal scrap in the aluminum foundry as defined under 40 CFR 63.1503. The Permittee shall not operate sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns. Therefore, the requirements of 40 CFR 63, Subpart RRR do not apply.**
- (b) The Permittee shall notify U.S. EPA in writing at least 30 days prior to charging any materials other than clean charge, internal scrap, or customer returns, or operating sweat furnaces, thermal chip dryers, or dryers/delacquering kilns/decoating kilns.**

- (c) If the Permittee chooses to change its operations, as described in paragraph (b) above, it will fully comply with the NESHAP General Provisions at 40 CFR 63, Subpart A and the NESHAP for Secondary Aluminum Production at 40 CFR 63, Subpart RRR.
- (d) Any change or modification to this source as described in paragraph (b) above shall also require prior approval from the Office of Air Quality (OAQ) before such change can occur.

~~D.1.6 Secondary Aluminum Production Limits [40 CFR Part 63, Subpart RRR]~~

~~Effective March 23, 2004 for reverberatory furnaces A1, A2, A4 through A13, and upon startup for reverberatory furnace A3, and pursuant to 40 CFR 63.1505(k), the Permittee shall comply with the following emission limitations:~~

- (a) Pursuant to 40 CFR 1505(k)(3), for each secondary aluminum processing unit, the Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of total tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans (D/F) in excess of:

$$L_{cDF} = \frac{\sum_{i=1}^n (L_{iDF} T_{ii})}{\sum_{i=1}^n (T_{ii})}$$

~~where: L_{iDF} = The D/F emission limit for an individual Group 1 furnace (i.e., furnace "i") in the SAPU. This limit shall be 15 micrograms (Eg) of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge or per ton of aluminum produced for each Group 1 furnace (i.e., each reverberatory furnace), where TEQ is the toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzop-Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update" [40 CFR 63.1503][40 CFR 63.1505(i)][40 CFR 63.1505(k)]~~

~~T_{ii} = the feed/charge rate for individual Group 1 furnace "i"; and~~

~~L_{cDF} = the D/F emission limit for each secondary aluminum processing unit.~~

- (b) Pursuant to 40 CFR 63.1505(k)(5), the Permittee may demonstrate compliance with the emission limits of paragraph (a) by demonstrating that each Group 1 furnace in the secondary aluminum processing unit is in compliance with the applicable emission limit for an individual Group 1 furnace specified as L_{iDF} in paragraph (a) of this condition.
- (c) With prior approval from IDEM, Permittee may redesignate any existing Group 1 furnace at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of 40 CFR Part 63, Subpart RRR and will be irreversible.

~~D.1.7 Labeling [40 CFR Part 63.1506(b)]~~

~~The Permittee shall provide and maintain easily visible labels that shall be posted at each reverberatory furnace. Said labels shall identify the applicable emission limits and means of compliance, including:~~

- (a) The type of affected source or emission unit (e.g., group 1 furnace, group 2 furnace, in-line fluxer); and

- (b) ~~The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.~~

~~D.1.8 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR Part 63.1510(b)]~~

~~The Permittee shall prepare and implement a written Operation, Maintenance, and Monitoring (OM&M) plan for each reverberatory furnace and shall submit the plan to IDEM, OAQ, for review and approval. The OM&M plan shall be submitted by the compliance date established at 40 CFR Part 63.1501(a) for the existing furnaces, and within ninety (90) days of the successful initial performance test for new furnace A3. The plan must be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of 40 CFR Part 63.1510 and is otherwise consistent with the requirements of 40 CFR Part 63, Subpart RRR. The Permittee must comply with all of the provisions of the OM&M plan as submitted to IDEM, unless and until the plan is revised in accordance with the following procedures. If IDEM determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR Part 63.1510 or Subpart RRR, the Permittee must promptly make all necessary revisions and resubmit the revised plan. If the Permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to IDEM. Each plan must contain the following information:~~

- (a) ~~Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.~~
- (b) ~~A monitoring schedule for each affected source and emission unit.~~
- (c) ~~Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR Part 63.1505.~~
- (d) ~~Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:~~
 - (1) ~~Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and~~
 - (2) ~~Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR 63, Subpart A.~~
- (e) ~~Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.~~
- (f) ~~Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (a) of this condition, including:~~
 - (1) ~~Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and~~
 - (2) ~~Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.~~

- (g) ~~— A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.~~
- (h) ~~— Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR Part 63.1510(e) for each group 1 furnace not equipped with an add-on air pollution control device (i.e., reverberatory furnaces A1 through A13).~~

D.1.9 Site-Specific Monitoring Plan [40 CFR Part 63.1510(e)]

The Permittee shall develop, in consultation with IDEM, OAQ, a written site-specific monitoring plan for each furnace not equipped with an add-on air pollution control device (i.e., reverberatory furnaces A1 through A13). The site-specific monitoring plan shall be submitted to IDEM, OAQ, as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters for that pollutant. Test data must establish the highest level of D/F that will be emitted from each furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If IDEM, OAQ, determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of this section or this subpart, the Permittee must promptly make all necessary revisions and resubmit the revised plan to IDEM, OAQ. The site-specific monitoring plan shall include the following information:

- (a) ~~— Each site-specific monitoring plan shall document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.~~
- (b) ~~— Each site-specific monitoring plan shall include provisions for unit labeling as required in 40 CFR Part 63.1510(e), feed/charge weight measurement (or production weight measurement) as required in 40 CFR Part 63.1510(e), and flux weight measurement as required in 40 CFR Part 63.1510(j).~~
- (c) ~~— If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan shall include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in 40 CFR 63, Subpart A.~~
- (d) ~~— If a continuous opacity monitoring system is included in a site-specific monitoring plan, the plan shall include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of this subpart.~~
- (e) ~~— If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan shall include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40 CFR Part 63.1510(p).~~
- (f) ~~— If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan shall include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40 CFR Part 63.1510(q).~~

D.1.405 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

~~D.1.446~~ Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to Significant Permit Revision No. 033-17746, issued on January 14, 2004, in order to demonstrate compliance with Conditions D.1.1 and D.1.3, the following shall apply:

- (a) For purposes of PM and PM10 compliance stack testing, the thirteen (13) furnaces at this source are grouped as follows:

Group A:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A8	0.25	2.5 (1 burner)
A11	0.9	15.9 (6 burners, total)
A7	1.0	5.2 (2 burners, total)

Group B:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A4	1.25	10.05 (3 burners, total)
A5	1.25	6.7 (2 burners, total)
A6	1.25	10.05 (3 burners, total)

Group C:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A9	2.5	10.6 (4 burners, total)
A10	2.5	9.0 (6 burners, total)
A2	3.28	9.2 (4 burners, total)
A12	3.5	12.5 (2 burners, total)

Group D:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A13	3.5	12.5 (2 burners, total)
A1	3.83	9.2 (4 burners, total)
A3	6.0	24.2 (2 burners, total)

- (b) The Permittee shall perform PM and PM10 testing on one (1) furnace from each of Groups A, B, C and D by December 31, 2005. The tests shall be conducted during metal melting and metal fluxing utilizing methods as approved by the Commissioner. This test shall be repeated every twenty-one (21) months from the date of the prior valid compliance demonstration, but shall not be repeated on any one (1) furnace in a group until all furnaces in the respective group are tested. The first complete PM/PM10 testing of Groups A, B and C shall not include furnaces A11, A5, A6, A9 and A2.

~~D.1.12~~ Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart RRR]

In order to demonstrate compliance with Condition D.1.5 and 40 CFR 63, Subpart RRR, the Permittee shall:

- (a) ~~For existing reverberatory furnaces, perform D/F testing by the 40 CFR Part 63.1501(a) compliance date (i.e., March 24, 2003), and no later than one hundred eighty (180) days after initial startup for new facilities, in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Commissioner to measure the concentration of D/F. Testing shall be conducted in accordance with Section C - Performance Testing.~~

- (b) ~~With the prior approval of IDEM, the Permittee may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied [40 CFR 63.1511(f)]:~~
- (1) ~~The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;~~
 - (2) ~~The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;~~
 - (3) ~~The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;~~
 - (4) ~~The tested emission unit must be of the same design as the emission units that it represents; and~~
 - (5) ~~The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.~~
- (c) ~~The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. To establish the minimum or maximum value or range, the Permittee shall use the appropriate procedures in 40 CFR 63.1511(g) and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met. [40 CFR 63.1511(g)]~~
- (d) ~~Pursuant to 40 CFR 63.1512(e), the site-specific monitoring plan required by 40 CFR 63.1510(e) and Condition D.1.9 shall include data and information demonstrating compliance with the applicable emission limits for each Group 1 furnace (i.e., each reverberatory furnace).~~
- (e) ~~Pursuant to 40 CFR 63.1512(j), the results of the performance tests required by paragraph (a) of this condition shall be used to establish emission rates in g TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t).~~
- (f) ~~Pursuant to paragraphs (k) and (n) of 40 CFR 63.1512, during the performance tests the Permittee shall comply with the requirements and use the procedures in these sections of 40 CFR 63.1512 respectively for:~~
- (1) ~~Measuring or otherwise determining feed/charge weight to the affected emission unit (i.e., each reverberatory furnace); and~~
 - (2) ~~Establishing an operating parameter value or range for the total reactive chlorine flux injection rate.~~
- (g) ~~Pursuant to Paragraphs (b), (d), and (e) of 40 CFR 63.1513, the Permittee shall comply with the requirements and use the applicable equations, references, and/or procedures in these sections of 40 CFR 63.1513 respectively for:~~
- (1) ~~Determining compliance with an emission limit for D/F;~~

- (2) — Conversion of D/F measurements to TEQ units; and
- (3) — Determining compliance with emission limits for a secondary aluminum processing unit.

~~D.1.13 Feed/Charge Determination [40 CFR Part 63.1506(d)]~~

~~Pursuant to 40 CFR 63.1506, the Permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. Alternatively, the Permittee may choose to measure and record aluminum production weight from an affected emission unit rather than feed/charge weight provided that the aluminum production weight is measured for all emission units within a secondary aluminum processing unit and all calculations to demonstrate compliance with the emission limits for secondary aluminum processing units are based on aluminum production weight rather than feed/charge weight.~~

~~D.1.14 Secondary Aluminum Production Compliance Determination [40 CFR Part 63, Subpart RRR]~~

~~Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to each reverberatory furnace:~~

- (a) — For each furnace, the Permittee shall [63.1506(m)]:
 - (1) — Maintain the total reactive flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
 - (2) — Operate each furnace in accordance with the work practice/pollution prevention measures documented in the Operation, Maintenance, and Monitoring (OM&M) plan and within the parameter values or ranges established in the OM&M plan.
- (b) — Pursuant to 40 CFR 63.1510(j), for each furnace the Permittee shall comply as follows:
 - (1) — Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of reactive flux.
 - (2) — Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(e).
 - (3) — The Permittee may apply to IDEM for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- (c) — Pursuant to 40 CFR 63.1510(s)(1), the Permittee shall include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:
 - (1) — The identification of each emission unit in the secondary aluminum processing unit (SAPU);
 - (2) — The specific control technology or pollution prevention measure to be used for each emission unit in the SAPU and the date of its installation or application;

- ~~(3) The emission limit calculated for each SAPU and performance test result with supporting calculations demonstrating initial compliance with each applicable emission limit;~~
- ~~(4) Information and data demonstrating compliance for each emission unit with all applicable design equipment work practice or operational standards of Subpart RRR; and~~
- ~~(5) The monitoring requirements applicable to each emission unit in a SAPU and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t).~~
- ~~(d) The SAPU compliance procedures within the OM&M plan shall not contain any of the information provided in 40 CFR 63.1510(s)(2)(i) through (iv), as follows: [40 CFR 63.1510(s)(2)]
 - ~~(1) Any averaging among emissions of differing pollutants;~~
 - ~~(2) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;~~
 - ~~(3) The inclusion of any emission unit while it is shutdown; or~~
 - ~~(4) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.~~~~
- ~~(e) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the Permittee must submit a request to IDEM containing the information required by 40 CFR 63.1510(s)(1) and obtain approval of IDEM prior to implementing any revisions. [40 CFR 63.1510(s)(3)]~~
- ~~(f) If the Permittee wishes to use an alternative monitoring method to demonstrate compliance with any emission standard in 40 CFR Part 63, Subpart RRR, other than those alternative monitoring methods which may be authorized pursuant to 40 CFR Part 63.1510(j)(5) and 40 CFR Part 63.1510(v), the Permittee may submit an application to the IDEM. Any such application will be processed according to the criteria and procedures set forth in 40 CFR Part 63.1510(w)(1) through (6).~~

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.157 Visible Emissions Notations

- (a) Visible emission notations of the reverberatory melt furnaces' exhaust stacks (E-1 through E-13) shall be performed once per shift during normal daylight operations when metal melting and fluxing is occurring and when exhausting to the atmosphere. 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) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

~~D.1.16 Labeling [40 CFR Part 63.1510(c)]~~

~~The Permittee shall inspect the labels for each furnace required by Condition D.1.7 at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR Part 63.1506(b) are intact and legible.~~

~~D.1.17 Feed/Charge Determination [40 CFR Part 63.1510(e)]~~

~~The Permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, each reverberatory furnace over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the Permittee may use a procedure acceptable to IDEM to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.~~

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

~~D.1.18 Corrective Action [40 CFR Part 63.1506(p)]~~

~~When a process parameter deviates from the value or range established during the performance test and incorporated in the Operation, Maintenance, and Monitoring Plan, the Permittee shall initiate corrective action. The corrective action shall restore operation of the affected emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken shall include follow up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of the deviation.~~

~~D.1.19 Compliance Monitoring Requirements [40 CFR Part 63.1510(t)] [40 CFR Part 63.1510(u)]~~

~~Pursuant to 40 CFR Subpart RRR, on and after the compliance date, the Permittee shall monitor all emission units and control equipment according to the following requirements [40 CFR Part 63.1510(a)]:~~

- ~~(a) The Permittee shall calculate and record the 3-day, 24-hour rolling average emissions of D/F for each reverberatory furnace on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall [40 CFR Part 63.1510(t)]:~~
 - ~~(1) Calculate and record the total weight of material charged to each furnace for each twenty-four (24-) hour day of operation using the feed/charge weight data collected as required under Subpart RRR. If the Permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.~~

- (2) ~~To provide emissions for each furnace for the twenty-four (24-) hour period, in pounds: multiply the total feed/charge weight to the furnace or the weight of aluminum produced by the furnace for the twenty-four (24-) hour period, by the emission rate (in lb/ton of feed/charge) for that furnace (as determined during the emission test).~~
- (3) ~~Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.~~
- (4) ~~Compute the 24-hour daily emission rate using the following equation:~~

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n (T_i)}$$

~~where,~~

~~E_{day} = The daily D/F emission rate for the secondary aluminum processing unit for the 24-hour period;~~

~~T_i = The total amount of feed, or aluminum produced, for emission unit "i" for the 24-hour period (tons);~~

~~ER_i = The measured emission rate for emission unit "i" as determined in the performance test (lb/ton or $\mu\text{g}/\text{Mg}$ of feed/charge); and~~

~~n = The number of emission units in the secondary aluminum processing unit.~~

- (5) ~~Calculate and record the three (3-) day, twenty-four (24-) hour rolling average for each pollutant each day by summing the daily emission rates for D/F over the three (3) most recent consecutive days and dividing by three (3).~~
- (b) ~~As an alternative to the procedures in (a) above, the Permittee may demonstrate through performance tests, that each individual furnace within the secondary aluminum production unit is in compliance with the applicable emission limit [40 CFR 63.1510(u)].~~

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.208 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) Calendar dates covered in the compliance determination period;
- (2) Total aluminum produced in furnaces A2, A3, A4, A6, A7, A8, and A10 - A12 for each month; and
- (3) Total aluminum produced in furnaces A1, A5, A9, and A13 for each month.

- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Total hexachloroethane input usage at the source for each month;
 - (3) Total SF-350 type flux input usage at the source for each month, and weight percent of fluorine in the SF-350 type flux; and
 - (4) The total weight of HCl and HF, each as a single HAP, emitted for each compliance period. This determination shall be based on complete (100%) chemical conversion of chlorine in the hexachloroethane in the flux to HCl emitted, and complete (100%) chemical conversion of fluorine in the flux to HF emitted based on a maximum of 21.614 weight percent fluorine in the flux.
- (c) To document compliance with Condition D.1.457, the Permittee shall maintain records of once per shift visible emission notations of the reverberatory melt furnace exhaust stacks.
- (d) To document compliance with Condition D.1.405, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.1.21 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]
Pursuant to 40 CFR Part 63.1517, the Permittee shall comply with the following:~~

- ~~(a) As required by 40 CFR 63.10(b), the Permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR Part 63, Subpart RRR.~~
- ~~(b) The Permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.~~
- ~~(c) The Permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.~~
- ~~(d) In addition to the general records required by 40 CFR 63.1510(b), the Permittee of an affected unit, including an emission unit in a secondary aluminum processing unit (i.e., furnaces A1 through A13), must maintain records of:
 - ~~(1) For each group 1 furnace at this source, records of 15-minute block average weights of total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.~~
 - ~~(2) For each continuous monitoring system, records required by 40 CFR 63.10(c).~~
 - ~~(3) For each furnace as a unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.~~~~

- ~~(4) — Approved site-specific monitoring plan for each furnace, as a group 1 furnace without an add-on pollution control device, with records documenting conformance with the plan.~~
- ~~(5) — Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.~~
- ~~(6) — Records for any approved alternative monitoring or test procedure.~~
- ~~(7) — Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - ~~(A) — Startup, shutdown, and malfunction plan;~~
 - ~~(B) — OM&M plan; and~~
 - ~~(C) — Site-specific secondary aluminum processing unit emission plan.~~~~
- ~~(8) — For each secondary aluminum processing unit, records of total charge weight, or if the Permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.~~

D.1.22 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]

- ~~(a) — Pursuant to 40 CFR 63.1515 and 63.1516, the Permittee shall provide notification of the anticipated date for conducting performance tests. The Permittee shall notify IDEM, OAQ, of the intent to conduct a performance test at least 60 days before the performance test is scheduled.~~
- ~~(b) — Pursuant to 40 CFR 63.1515(b), the Permittee shall submit a notification of compliance status report within 60 days after the compliance date specified in 40 CFR 63.1501, except within 90 days after conducting the initial performance test required by 40 CFR Part 63.1511(b) for furnace A3. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (1) through (8) below. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. The Permittee must provide duplicate notification to the U.S. EPA Region V, Regional Administrator. If a Permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:
 - ~~(1) — All information required in 40 CFR 63.9(h). The Permittee shall provide a complete performance test report for each furnace for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).~~
 - ~~(2) — The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.~~
 - ~~(3) — Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.~~
 - ~~(4) — The compliant operating parameter value or range established per Condition D.1.12(f) for each furnace, with supporting documentation and a description of the procedure used to establish the value, including the operating cycle or time period used in the performance test.~~~~

- (5) ~~If applicable, design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).~~
 - (6) ~~If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).~~
 - (7) ~~The OM&M plan.~~
 - (8) ~~Startup, shutdown, and malfunction plan, with revisions.~~
- (c) ~~Pursuant to 40 CFR 63.1516(a), the Permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The Permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:~~
- (1) ~~Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and~~
 - (2) ~~Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.~~
- (d) ~~Pursuant to 40 CFR 63.1516(b), the Permittee shall submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the Permittee must submit a report stating that no excess emissions occurred during the reporting period.~~
- ~~A report must be submitted if any of these conditions occur during a 6-month reporting period:~~
- (1) ~~An excursion of a compliant process or operating parameter value or range, as listed at Condition D.1.12(f).~~
 - (2) ~~An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).~~
 - (3) ~~An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR.~~
 - (4) ~~A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.~~
- (e) ~~The Permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR 63.1516(b)]~~

~~(f) Pursuant to 40 CFR 63.1516(c), for the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the Permittee shall certify continuing compliance based upon, but not limited to, the following conditions:~~

~~(1) Any period of excess emissions, as defined in the semiannual report, that occurred during the year were reported as required by this subpart; and~~

~~(2) All monitoring, record-keeping, and reporting requirements were met during the year.~~

D.1.239 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Conclusion

The operation of this stationary aluminum foundry and die casting plant shall be subject to the conditions of the attached proposed Significant Permit Modification No. 033-19703-00016.