



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 2, 2008

RE: Indalex, Inc. / 041-26404-00019

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

Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

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

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

Enclosures
FN-REGIS.dot 1/2/08



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REGISTRATION OFFICE OF AIR QUALITY

Indalex, Inc.
5120 N. Western Avenue
Connersville, Indiana 47331

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. R041-20242-00019	
Original signed by: Paul Dubenetzky, Chief Permits Branch Office of Air Quality	Issuance Date: February 3, 2005

First Registration Revision No. 041-26404-00019	
Issued by: <i>Original document signed by</i> Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 2, 2008

SECTION A

SOURCE SUMMARY

This registration 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 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary clean aluminum extruding operation.

Source Address:	5120 N. Western Avenue, Connersville, Indiana
Mailing Address:	5120 N. Western Avenue, Connersville, Indiana
General Source Phone Number:	(765) 825-1141
SIC Code:	3354
County Location:	Fayette County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) natural gas-fired billet furnace #8, identified as Unit 1, installed in 2001, exhausting at Stack 1, with a maximum capacity of 8,000 pounds per hour of aluminum billets and combustion input rated at 6.50 million British thermal units per hour.
- (b) One (1) natural gas-fired billet furnace #9, identified as Unit 18, approved for construction in 2008, exhausting at Stack 18, with a maximum capacity of 18,000 pounds per hour of aluminum billets and combustion input rated at 10.80 million British thermal units per hour.
- (c) One (1) forced air heater, identified as Unit 3, installed in 2001, exhausting at Stack 3, rated at 0.175 million British thermal units per hour.
- (d) One (1) forced air heater, identified as Unit 4, installed in 2001, exhausting at Stack 4, rated at 0.074 million British thermal units per hour.
- (e) Four (4) forced air heaters, identified as Units 5a, 5b, 5c, and 5d, installed in 2001, with heaters 5a and 5b exhausting at Stack 5A and heaters 5c and 5d exhausting at stack 5B, rated at 0.071 million British thermal units per hour, each.
- (f) One (1) natural gas-fired age oven, identified as Unit 19, approved for construction in 2008, exhausting at Stack 19, rated at 5.12 million British thermal units per hour.
- (g) One (1) natural gas-fired age oven, identified as Unit 20, approved for construction in 2008, exhausting at Stack 20, rated at 5.12 million British thermal units per hour.
- (h) One (1) natural gas-fired age oven, identified as Unit 21, approved for construction in 2008, exhausting at Stack 21, rated at 5.12 million British thermal units per hour.
- (i) Ten (10) forced air heaters, identified as Units 22 through 31, approved for construction in 2008, exhausting at Stack 22 through 31, rated at 0.30 million British thermal units per hour, each.

- (j) Two (2) oxypropylene flame cutting operations, identified as FC, installed in 1992, total capacity: sixty (60) feet per hour of aluminum with a 0.25 inch thickness.
- (k) One (1) caustic die cleaning system, approved for construction in 2008, consisting of 6 tanks; 2-4000 gallon tanks of Sodium Hydroxide, 3-1500 gallon tanks of different concentration of Sodium Hydroxide and 1-1200 gallon tank of water.
- (l) Two (2) gas fired age ovens, identified as Units 16 and 17, installed in January 2005, exhausting to Stacks 16 and 17, respectively, rated at 4.90 million British thermal units per hour, each.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

B.3 Registration Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM, the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to Registration No. 041-20242-00019 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this registration:

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

C.2 Fugitive Dust Emissions [326 IAC 6-4]

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

SECTION D.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) natural gas-fired billet furnace #8, identified as Unit 1, installed in 2001, exhausting at Stack 1, with a maximum capacity of 8,000 pounds per hour of aluminum billets and combustion input rated at 6.50 million British thermal units per hour.
- (b) One (1) natural gas-fired billet furnace #9, identified as Unit 18, approved for construction in 2008, exhausting at Stack 18, with a maximum capacity of 18,000 pounds per hour of aluminum billets and combustion input rated at 10.80 million British thermal units per hour.
- (c) One (1) forced air heater, identified as Unit 3, installed in 2001, exhausting at Stack 3, rated at 0.175 million British thermal units per hour.
- (d) One (1) forced air heater, identified as Unit 4, installed in 2001, exhausting at Stack 4, rated at 0.074 million British thermal units per hour.
- (e) Four (4) forced air heaters, identified as Units 5a, 5b, 5c, and 5d, installed in 2001, with heaters 5a and 5b exhausting at Stack 5A and heaters 5c and 5d exhausting at stack 5B, rated at 0.071 million British thermal units per hour, each.
- (f) One (1) natural gas-fired age oven, identified as Unit 19, approved for construction in 2008, exhausting at Stack 19, rated at 5.12 million British thermal units per hour.
- (g) One (1) natural gas-fired age oven, identified as Unit 20, approved for construction in 2008, exhausting at Stack 20, rated at 5.12 million British thermal units per hour.
- (h) One (1) natural gas-fired age oven, identified as Unit 21, approved for construction in 2008, exhausting at Stack 21, rated at 5.12 million British thermal units per hour.
- (i) Ten (10) forced air heaters, identified as Units 22 through 31, approved for construction in 2008, exhausting at Stack 22 through 31, rated at 0.30 million British thermal units per hour, each.
- (j) Two (2) oxypropylene flame cutting operations, identified as FC, installed in 1992, total capacity: sixty (60) feet per hour of aluminum with a 0.25 inch thickness.
- (k) One (1) caustic die cleaning system, approved for construction in 2008, consisting of 6 tanks; 2-4000 gallon tanks of Sodium Hydroxide, 3-1500 gallon tanks of different concentration of Sodium Hydroxide and 1-1200 gallon tank of water.
- (l) Two (2) gas fired age ovens, identified as Units 16 and 17, installed in January 2005, exhausting to Stacks 16 and 17, respectively, rated at 4.90 million British thermal units per hour, each.

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

Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes): the particulate matter (PM) emissions from furnace #8 and furnace #9 shall not exceed 10.4 and 17.9 pounds per hour when operating at a process weight rate of 4 and 9 tons per hour, respectively. The pound per hour limitation was calculated with the following equation:

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

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

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

**REGISTRATION
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	Indalex, Inc.
Address:	5120 N. Western Avenue
City:	Connersville, Indiana 47331
Phone Number:	(765) 825 1141
Registration No.:	041-20242-00019

I hereby certify that Indalex, Inc is :	<input type="checkbox"/> still in operation.
	<input type="checkbox"/> no longer in operation.
I hereby certify that Indalex, Inc is :	<input type="checkbox"/> in compliance with the requirements of Registration No. 041-20242-00019
	<input type="checkbox"/> not in compliance with the requirements of Registration No. 041-20242-00019

Authorized Individual (typed):
Title:
Signature:
Phone Number:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration Revision

Source Description and Location

Source Name:	Indalex, Inc.
Source Location:	5120 N. Western Avenue, Connersville, Indiana 47331
County:	Fayette
SIC Code:	3354
Registration No.:	R041-20242-00019
Registration Issuance Date:	February 3, 2005
Registration Revision No.:	R041-26404-00019
Permit Reviewer:	Renee Traivaranon

On April 10, 2008, the Office of Air Quality (OAQ) has received an application from Indalex, Inc., related to an addition of new emissions units to an existing stationary clean aluminum extruding operation.

Existing Approvals

The source was issued Registration No. R041-20242-00019 on February 3, 2005. This is the first revised registration to this source.

Proposed Changes

The source will add 14 new emission units; one furnace rated at 10.8 MMBtu/hr, three ovens rated at 5.12 MMBtu/hr each, and 10 forced air heaters rated at 0.30 MMBtu/hr each, and has removed or will remove 4 age ovens, and 7 forced air heaters. In addition, two caustic tanks will be replaced with one new caustic die cleaning system. Therefore, the following changes listed below are due to the modification at the source. Deleted language appears as ~~strike through~~ text and new language appears as **bold** text:

- (a) One (1) natural gas-fired billet ~~oven~~, **furnace #8**, identified as Unit 1, installed in 2001, exhausting at Stack 1, **with a maximum capacity of 8,000 pounds per hour of aluminum billets and combustion input** rated at 6.50 million British thermal units per hour.

(Note: There is no modification to the above unit, only description change to add information to indicate the maximum capacity of the unit and this unit is a furnace to heat aluminum billet.)

- ~~(b) One (1) natural gas age oven, identified as Unit 2, installed in 2001, exhausting at Stack 2, rated at 7.50 million British thermal units per hour.~~
- (b) **One (1) natural gas-fired billet furnace #9, identified as Unit 18, approved for construction in 2008, exhausting at Stack 18, with a maximum capacity of 18,000 pounds per hour of aluminum billets and combustion input rated at 10.80 million British thermal units per hour.**
- (c) One (1) forced air heater, identified as Unit 3, installed in 2001, exhausting at Stack 3, rated at 0.175 million British thermal units per hour.
- (d) One (1) forced air heater, identified as Unit 4, installed in 2001, exhausting at Stack 4, rated at 0.074 million British thermal units per hour.

- (e) Four (4) forced air heaters, identified as Units 5a, 5b, 5c, and 5d, installed in 2001, with heaters 5a and 5b exhausting at Stack 5A and heaters 5c and 5d exhausting at stack 5B, rated at 0.071 million British thermal units per hour, each.
- ~~(f) One (1) natural gas-fired age oven, identified as Unit 6, installed in 2004, exhausting at Stack 6, rated at 5.00 million British thermal units per hour.~~
- ~~(g) One (1) natural gas-fired billet oven, identified as Unit 7, installed in 1992, exhausting at Stack 7, rated at 3.30 million British thermal units per hour.~~
- ~~(h) One (1) natural gas-fired age oven, identified as Unit 8, installed in 1996, exhausting at Stack 8, rated at 6.00 million British thermal units per hour.~~
- (f) One (1) natural gas-fired age oven, identified as Unit 19, approved for construction in 2008, exhausting at Stack 19, rated at 5.12 million British thermal units per hour.**
- (g) One (1) natural gas-fired age oven, identified as Unit 20, approved for construction in 2008, exhausting at Stack 20, rated at 5.12 million British thermal units per hour.**
- (h) One (1) natural gas-fired age oven, identified as Unit 21, approved for construction in 2008, exhausting at Stack 21, rated at 5.12 million British thermal units per hour.**
- ~~(i) One (1) forced air heater, identified as Unit 9, installed in 1999, exhausting at Stack 9, rated at 0.112 million British thermal units per hour.~~
- ~~(j) One (1) radiant heater, identified as Unit 10, installed in 1995, exhausting at Stack 15, rated at 0.010 million British thermal units per hour.~~
- ~~(k) Two (2) forced air heaters, identified as Units 11 and 12, installed in 1983, exhausting at Stacks 10 and 11, respectively, rated at 0.154 million British thermal units per hour, each.~~
- ~~(l) Three (3) forced air heaters, identified as Units 13, 14, and 15, installed in 1992, exhausting at Stacks 12, 13, and 14, respectively, rated at 0.160 million British thermal units per hour, each.~~
- (i) Ten (10) forced air heaters, identified as Units 22 through 31, approved for construction in 2008, exhausting at Stack 22 through 31, rated at 0.30 million British thermal units per hour, each.**
- ~~(m) Two (2) oxypropylene flame cutting operations, identified as FC, installed in 1992, total capacity: sixty (60) feet per hour of aluminum with a 0.25 inch thickness.~~
- ~~(n) Two (2) Caustic Tanks, identified as CT1 and CT2, installed in 1992, containing sodium hydroxide, capacity: 450 gallons, each.~~
- (k) One (1) caustic die cleaning system, approved for construction in 2008, consisting of 6 tanks; 2-4000 gallon tanks of Sodium Hydroxide, 3-1500 gallon tanks of different concentration of Sodium Hydroxide and 1-1200 gallon tank of water.**
- ~~(e) Two (2) gas fired age ovens, identified as Units 16 and 17, to be installed in December 2004~~
January 2005, exhausting to Stacks 16 and 17, respectively, rated at 4.90 million British thermal units per hour, each.

(Note: There is no modification to the above unit, only description change to indicate the correction of the installation date, per information submitted in the application.)

Description of Emission Units

The following is a list of the new emission units and pollution control devices:

- (1) One (1) natural gas-fired billet furnace #9, identified as Unit 18, approved for construction in 2008, exhausting at Stack 18, with a maximum capacity of 18,000 pounds per hour of aluminum billets and combustion input rated at 10.80 million British thermal units per hour.
- (2) One (1) natural gas-fired age oven, identified as Unit 19, approved for construction in 2008, exhausting at Stack 19, rated at 5.12 million British thermal units per hour.
- (3) One (1) natural gas-fired age oven, identified as Unit 20, approved for construction in 2008, exhausting at Stack 20, rated at 5.12 million British thermal units per hour.
- (4) One (1) natural gas-fired age oven, identified as Unit 21, approved for construction in 2008, exhausting at Stack 21, rated at 5.12 million British thermal units per hour.
- (5) Ten (10) forced air heaters, identified as Units 22 through 31, approved for construction in 2008, exhausting at Stack 22 through 31, rated at 0.30 million British thermal units per hour, each.
- (6) One (1) caustic die cleaning system, approved for construction in 2008, consisting of 6 tanks; 2-4000 gallon tanks of Sodium Hydroxide, 3-1500 gallon tanks of different concentration of Sodium Hydroxide and 1-1200 gallon tank of water.

The following is a list of the existing emission units and pollution control devices:

- (1) One (1) natural gas-fired billet furnace #8, identified as Unit 1, installed in 2001, exhausting at Stack 1, with a maximum capacity of 8,000 pounds per hour of aluminum billets and combustion input rated at 6.50 million British thermal units per hour.
- (2) One (1) forced air heater, identified as Unit 3, installed in 2001, exhausting at Stack 3, rated at 0.175 million British thermal units per hour.
- (3) One (1) forced air heater, identified as Unit 4, installed in 2001, exhausting at Stack 4, rated at 0.074 million British thermal units per hour.
- (4) Four (4) forced air heaters, identified as Units 5a, 5b, 5c, and 5d, installed in 2001, with heaters 5a and 5b exhausting at Stack 5A and heaters 5c and 5d exhausting at stack 5B, rated at 0.071 million British thermal units per hour, each.
- (5) Two (2) oxypropylene flame cutting operations, identified as FC, installed in 1992, total capacity: sixty (60) feet per hour of aluminum with a 0.25 inch thickness.
- (6) Two (2) gas fired age ovens, identified as Units 16 and 17, installed in January 2005, exhausting to Stacks 16 and 17, respectively, rated at 4.90 million British thermal units per hour, each.

County Attainment Status

The source is located in Fayette County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

(a) Ozone Standards

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 and NOx emissions are considered when evaluating the rule applicability relating to ozone. Fayette County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

Fayette County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 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 a surrogate for PM2.5 emissions.

(c) Other Criteria Pollutants

Fayette County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Status of the Existing Source

The table below summarizes the potential to emit of the entire existing source, prior to the proposed revision:

Process/Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)							
	PM	PM10	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
20 natural gas combustion units	0.3	1.3	0.1	17.3	0.95	14.6	0.3	0.3 (Hexane)
Cutting units	0.3	0.3	negl.	negl.	negl.	negl.	negl.	negl.
Total PTE of the Entire Source	0.6	1.6	0.1	17.3	0.95	14.6	0.3	0.3 (Hexane)
Exemptions Levels	5	5	10	10	10	25	2.5	1
Registration Levels	25	25	25	25	25	100	-	-

negl. = negligible
 These emissions are based upon the registration No. R041-20242-00019, issued February 3, 2005.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations, page 1 through 7.

Permit Level Determination – Proposed Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-5.5-6. This table reflects the PTE of the proposed revision.

Process/Emission Unit	PTE of the Revision (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
14 natural gas combustion units	0.24	0.97	0.08	12.8	0.7	10.7	0.24	0.23 (Hexane)
Fugitive Emissions	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Total PTE of Proposed Revision	0.24	0.97	0.08	12.8	0.7	10.7	0.24	0.23 (Hexane)

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

This Registration is being revised through a Registration Revision pursuant to 326 IAC 2-5.5-6(g), because the revision involves an addition of new emission units to an existing source which has potential to emit less than 326 IAC 2-2, 326 IAC 2-3 or 326 IAC 2-4.1 but greater than specified in 326 IAC 2-5.5-6(d)(12) (Registration Notice-Only Changes).

PTE of the Entire Source After Issuance of the Registration Revision

The table below summarizes the potential to emit of the entire source before revision (shown in strikethrough) and after issuance of this revision (shown in bold), reflecting all emission units.

Process/Emission Unit	Potential To Emit of the Entire Source with the Revision (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
2023 natural gas combustion units	0.3 0.4	1.3 1.5	0.1	17.3 20	0.95 1.1	14.6 16.9	0.2 0.4	0.20.4 (Hexane)
2 flame cutting units	0.3	0.3	negl.	negl.	negl.	negl.	negl.	negl.
Fugitive Emissions	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Total PTE of Proposed Revision	0.60.7 0.7	1.61.8 1.8	0.1	17.20 20	0.951 1.1	14.617 16.9	0.20.4 0.4	0.20.4 (Hexane)
Exemptions Levels	5	5	10	10	10	25	2.5	1
Registration Levels	25	25	25	25	25	100	-	-
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.								

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all emission units.

Process/Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
23 natural gas combustion units	0.4	1.5	0.1	20	1.1	16.9	0.4	0.4 (Hexane)
2 flame cutting units	0.3	0.3	--	--	--	--	--	0.0004 Nickle
Fugitive Emissions	--	--	--	--	--	--	--	--
Total PTE of Entire Source	0.7	1.8	0.1	20	1	17	0.4	0.4 (Hexane)
Exemptions Levels	5	5	10	10	10	25	2.5	1
Registration Levels	25	25	25	25	25	100	-	-
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.								

- (a) This revision will not change the registration status of the source, because the potential to emit of all pollutants from the entire source will still be less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations).
- (b) This revision will not change the minor status of the source, because the potential to emit of any single HAP will still be less than ten (10) tons per year and the PTE of a combination of HAPs will still be less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

The federal rules applicable to the existing emission units at this source will not change as a result of this revision.

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-5.5 (Registrations)
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

Furnace/combustion Operation

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the furnace operation, furnace #8 and furnace #9 shall not exceed 10.4 and 17.9 pounds per hour when operating at a process weight rate of 4 and 9 tons per hour. The pound per hour limitation was calculated with the following equation:

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

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

Each furnace operation is in compliance with the limit because this source only processes clean aluminum and the aluminum is heated (up to 900 °F) but not melted in these furnaces.

- (b) The requirements of 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) are not applicable to the combustion units because they are not indirect heating facilities.

Conclusion and Recommendation

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 April 10, 2008.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed Registration Revision No. 041-26404-00019. The staff recommends to the Commissioner that this Registration Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Renee Traivaranon at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5615 or toll free at 1-800-451-6027 extension 4-5615.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Emissions Calculations
New Natural Gas Combustion Units
MM BTU/HR <100**

Company Name: Indalex, Inc.
Address City IN Zip: 5120 N. Western Avenue, Connersville, Indiana 47331
Permit Number: 041-26404-00019
Reviewer: Renee Traivaranon
Date: April 21, 2008

Unit	Number of Units	Total Heat Input Capacity (MMBtu/hr)
Unit 18	1	10.8
Unit 19	1	5.12
Unit 20	1	5.12
Unit 21	1	5.12
Unit 22-31	10	3.00
Total Heat Input Capacity (MMBtu/hr)		29.16

Heat Input Capacity
MMBtu/hr

29.2

Potential Throughput
MMCF/yr

255

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100 **see below	5.50	84.0
Potential Emission in tons/yr	0.243	0.97	0.077	12.8	0.702	10.7

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
New Natural Gas Combustion Units
HAPs Emissions**

Company Name: Indalex, Inc.
Address City IN Zip: 5120 N. Western Avenue, Connersville, Indiana 47331
Permit Number: 041-26404-00019
Reviewer: Renee Traivaranon
Date: April 21, 2008

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenzene 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340
Potential Emission in tons/yr	0.0003	0.0002	0.010	0.230	0.000

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total
Potential Emission in tons/yr	0.0001	0.0001	0.0002	0.0000	0.0003	0.241

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Total Natural Gas Combustion Units for Source**

Company Name: Indalex, Inc.
Address City IN Zip: 5120 N. Western Avenue, Connersville, Indiana 47331
Permit Number: 041-26404-00019
Reviewer: Renee Traivaranon
Date: April 21, 2008

Unit	Number of Units	Total Heat Input Capacity (MMBtu/hr)
Unit 1	1	6.50
Unit 3	1	0.175
Unit 4	1	0.074
Units 5a, 5b, 5c, 5d	4	0.284
Unit 18	1	10.8
Unit 19	1	5.12
Unit 20	1	5.12
Unit 21	1	5.12
Unit 22-31	10	3.00
Units 16 and 17	2	9.82
Total Heat Input Capacity (MMBtu/hr)		46.01

Heat Input Capacity
MMBtu/hr

46.0

Potential Throughput
MMCF/yr

403

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.383	1.53	0.121	20.1	1.108	16.9

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Total Natural Gas Combustion Units for Source
HAPs Emissions**

Company Name: Indalex, Inc.
Address City IN Zip: 5120 N. Western Avenue, Connersville, Indiana 47331
Permit Number: 041-26404-00019
Reviewer: Renee Traivaranon
Date: April 21, 2008

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenzene 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340
Potential Emission in tons/yr	0.0004	0.0002	0.015	0.363	0.001

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total
Potential Emission in tons/yr	0.0001	0.0002	0.0003	0.0001	0.0004	0.380

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Welding and Thermal Cutting**

Company Name: Indalex, Inc.
Address City IN Zip: 5120 N. Western Avenue, Connersville, Indiana 47331
Permit Number: 041-26404-00019
Reviewer: Renee Traivaranon
Date: April 23, 2008

FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxypropylene	2	0.250	12.0	0.1622	0.0005	0.0001	0.0003	0.058	0.000015	0.00000001	0.000	0.00001
EMISSION TOTALS												
Potential Emissions lbs/hr								0.058	0.00001	0.0000	0.0000	0.00001
Potential Emissions lbs/day								1.401	0.0004	0.0000	0.0000	0.0004
Potential Emissions tons/year								0.256	0.0001	0.0000	0.0000	0.0001

METHODOLOGY

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.