



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: September 5, 2012

RE: Littler Die cast Corporation/ 035 - 31002 - 00050

FROM: Matthew Stuckey, Branch 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 13-15-5-3, this permit 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.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 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 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
FNPER.dot12/03/07



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**New Source Construction and Minor Source Operating
Permit
OFFICE OF AIR QUALITY**

**Littler Diecast Corporation
400 West Walnut Street
Albany, Indiana 47320**

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

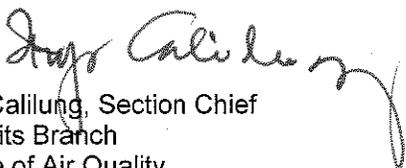
Operation Permit No.: M035-31002-00050	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: September 5, 2012 Expiration Date: September 5, 2017

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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 and A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary aluminum die casting facility, melting only clean charge.

Source Address:	400 West Walnut Street, Albany, Indiana 47320
General Source Phone Number:	765-789-4456
SIC Code:	3363 (Aluminum Die Castings)
County Location:	Delaware
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset 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

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

- (a) One (1) natural gas-fired holding furnace, identified as 502, installed in 1954, with a maximum heat input capacity of 0.3 MMBtu/hr, with a maximum throughput capacity of 175 lb/hr clean aluminum and a maximum flux throughput of 0.021 lb/hr, using no controls, and exhausting internally.
- (b) One (1) natural gas-fired reverberatory melting furnace, identified as 501, installed in 1982, with a maximum heat input capacity of 4.0 MMBtu/hr, with a maximum throughput capacity of 1000 lb/hr clean aluminum and a maximum flux throughput of 0.333 lb/hr, using no controls, and exhausting through stack F501.
- (c) One (1) natural gas-fired stack melting furnace, identified as 500A, installed in 2004, with a maximum heat input capacity of 2.8 MMBtu/hr, with a maximum throughput capacity of 3600 lb/hr clean aluminum and a maximum flux throughput of 0.417 lb/hr, using no controls, and exhausting through stack F500A.
- (d) One (1) natural gas-fired stack melting furnaces, identified as 525, installed in 2005, with a maximum heat input capacity of 3.0 MMBtu/hr, with a maximum throughput capacity of 4000 lb/hr clean aluminum and a maximum flux throughput of 0.0.833 lb/hr, using no controls, and exhausting through stack F525M.
- (e) One (1) natural gas-fired holding furnace, identified as 525, installed in 2005, with a maximum heat input capacity of 2.4 MMBtu/hr, with a combined maximum throughput capacity of 4000 lb/hr clean aluminum, using no controls, and exhausting through stacks F525H.
- (f) One (1) shot blast machine, identified as 420, installed in 2010, with 7.5 HP motor, with a maximum throughput of 11,400 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.

- (g) One (1) shot blast machine, identified as 421, installed in 2010, with 15.0 HP motor, with a maximum throughput of 22,800 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.
- (h) One (1) shot blast machine, identified as 422, installed in 2010, with 15.0 HP motor, with a maximum throughput of 19,680 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.

Note: Each shot blast machine has a dust collector, but all exhausting through one stack.

- (i) One (1) die casting operation, consisting of eighteen (18) cells, identified as ADC, installed in 2010, with a combined maximum throughput of 8,600 lb/hr, using no controls, and exhausting inside the building.
- (j) One (1) sand polishing, consisting of two (2) polishing lathe cells, identified as 226, installed in 2010, with a maximum capacity of 0.07 lb/hr combined throughput, controlled by a dust collector, exhausting through stack PLDC, and using machining coolant identified as CF, with a combined maximum throughput of 810 gallons of coolant per year, exhausting inside the building.
- (k) One (1) Die Lube Process, with a maximum product throughput of 4,620 gallons per year, using no controls, exhausting inside the building.
- (l) Eighteen (18) natural gas-fired heaters, with a combined maximum heat input capacity of 14.29 MMBtu/hr, using no controls, and exhausting through a stack. (Appendix A of this Technical Support Document (TSD) lists each unit and its corresponding stack vent.)
- (m) Three (3) cooling towers, consisting of the following:
 - (1) One (1) West 1 Cooling Tower, identified as ECT1, with a maximum throughput of 215 gallons per minute, exhausting through stack ECT1;
 - (2) One (1) West 2 Cooling Tower, identified as ECT2, with a maximum throughput of 215 gallons per minute, exhausting through stack ECT2;
 - (3) One (1) East 1 Cooling Tower, identified as ECT3, with a maximum throughput of 450 gallons per minute, exhausting through stack ECT3.
- (n) One (1) hydraulic fluid storage tank, identified as HF, with a maximum storage capacity of 2,500 gallons, and a maximum throughput capacity of 20,000 gallons per year, exhausting internally.
- (o) Fugitive dust source from paved roads.

SECTION B GENERAL CONDITIONS

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

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

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, M035-31002-00050, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

B.6 Enforceability

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

B.7 Severability

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

B.8 Property Rights or Exclusive Privilege

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

B.9 Duty to Provide Information

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

B.10 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (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 permit.
- (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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 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.11 Preventive Maintenance Plan [326 IAC 1-6-3]

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

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

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

The Permittee shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M035-31002-00050 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.13 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.14 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.15 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.16 Source Modification Requirement

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

B.17 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.18 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.19 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.20 Credible Evidence [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 C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

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

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

C.2 Permit Revocation [326 IAC 2-1.1-9]

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

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (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 permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.8 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11]

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

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

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

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

- (e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

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

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of

permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

- (a) One (1) natural gas-fired holding furnace, identified as 502, installed in 1954, with a maximum heat input capacity of 0.3 MMBtu/hr, with a maximum throughput capacity of 175 lb/hr clean aluminum and a maximum flux throughput of 0.021 lb/hr, using no controls, and exhausting internally.
- (b) One (1) natural gas-fired reverberatory melting furnace, identified as 501, installed in 1982, with a maximum heat input capacity of 4.0 MMBtu/hr, with a maximum throughput capacity of 1000 lb/hr clean aluminum and a maximum flux throughput of 0.333 lb/hr, using no controls, and exhausting through stack F501.
- (c) One (1) natural gas-fired stack melting furnace, identified as 500A, installed in 2004, with a maximum heat input capacity of 2.8 MMBtu/hr, with a maximum throughput capacity of 3600 lb/hr clean aluminum and a maximum flux throughput of 0.417 lb/hr, using no controls, and exhausting through stack F500A.
- (d) One (1) natural gas-fired stack melting furnaces, identified as 525, installed in 2005, with a maximum heat input capacity of 3.0 MMBtu/hr, with a maximum throughput capacity of 4000 lb/hr clean aluminum and a maximum flux throughput of 0.0.833 lb/hr, using no controls, and exhausting through stack F525M.
- (e) One (1) natural gas-fired holding furnace, identified as 525, installed in 2005, with a maximum heat input capacity of 2.4 MMBtu/hr, with a combined maximum throughput capacity of 4000 lb/hr clean aluminum, using no controls, and exhausting through stacks F525H.
- (f) One (1) shot blast machine, identified as 420, installed in 2010, with 7.5 HP motor, with a maximum throughput of 11,400 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.
- (g) One (1) shot blast machine, identified as 421, installed in 2010, with 15.0 HP motor, with a maximum throughput of 22,800 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.
- (h) One (1) shot blast machine, identified as 422, installed in 2010, with 15.0 HP motor, with a maximum throughput of 19,680 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.

Note: Each shot blast machine has a dust collector, but all exhausting through one stack.
- (i) One (1) die casting operation, consisting of eighteen (18) cells, identified as ADC, installed in 2010, with a combined maximum throughput of 8,600 lb/hr, using no controls, and exhausting inside the building.
- (j) One (1) sand polishing, consisting of two (2) polishing lathe cells, identified as 226, installed in 2010, with a maximum capacity of 0.07 lb/hr combined throughput, controlled by a dust collector, exhausting through stack PLDC, and using machining coolant identified as CF, with a combined maximum throughput of 810 gallons of coolant per year, exhausting inside the building.
- (k) One (1) Die Lube Process, with a maximum product throughput of 4,620 gallons per year, using no controls, exhausting inside the building.
- (l) Eighteen (18) natural gas-fired heaters, with a combined maximum heat input capacity of 14.29 MMBtu/hr, using no controls, and exhausting through a stack. (Appendix A of this

Technical Support Document (TSD) lists each unit and its corresponding stack vent.)

(m) Three (3) cooling towers, consisting of the following:

- (1) One (1) West 1 Cooling Tower, identified as ECT1, with a maximum throughput of 215 gallons per minute, exhausting through stack ECT1;
- (2) One (1) West 2 Cooling Tower, identified as ECT2, with a maximum throughput of 215 gallons per minute, exhausting through stack ECT2;
- (3) One (1) East 1 Cooling Tower, identified as ECT3, with a maximum throughput of 450 gallons per minute, exhausting through stack ECT3.

(n) One (1) hydraulic fluid storage tank, identified as HF, with a maximum storage capacity of 2,500 gallons, and a maximum throughput capacity of 20,000 gallons per year, exhausting internally.

(o) Fugitive dust source from paved roads.

(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 2-6.1-5(a)(1)]

D.1.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the melting furnace operation shall not exceed the following pounds per hour when operating at corresponding process weight rates, in tons per hour, as indicated in the table below.

Emission Unit	Aluminum Throughput (Lbs. per Hr.)	Flux Throughput (Lbs. per Hr.)	Total Process Weight Rate (Lbs. per Hr.)	Total Process Weight Rate (Tons per Hr.)	PM Emissions Limit (Pounds per Hour)
Holding Furnace 502	175.0	0.021	175.021	0.0875	0.80
Melt Furnace 501	1000.0	0.333	1000.333	0.5002	2.58
Melt Furnace 500A	3600.0	0.417	3600.417	1.8002	6.08
Melt Furnaces 525	4000.0	0.833	4000.833	2.0004	6.53

Total Process Weight Rate tons/hr = aluminum and flux throughput lb/hr/2000 lbs

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:

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

(b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the shot blast operation shall not exceed the following pounds per hour when operating at corresponding process weight rates, in tons per hour, as indicated in the table below.

Shot Blast Unit	Casting and Shot Throughput (Lbs. per Hr.)	Total Process Weight Rate (Tons per Hr.)	PM Emissions Limit (Pounds per Hour)
Shot Blast Unit 420	11,400	5.70	13.15
Shot Blast Unit 421	22,800	11.40	20.93
Shot Blast Unit 422	19,680	9.84	18.97

Total Process Weight Rate tons/hr = casting and shot throughput lb/hr/2000 lbs

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

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

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

D.1.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) In order to render 326 IAC 2-2 (PSD) not applicable, the Permittee shall melt only clean charge in the reverberatory melt furnace, identified as 501, and the stack melting furnaces, identified as 500A and 525, at all times.
- (b) Clean charge shall be defined as furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650°F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher, and runaround scrap.

D1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

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

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-1.1-11]

- (a) In order to demonstrate the compliance status with Condition D.1.1(b), the Permittee shall perform PM, PM10, and PM2.5 testing (before control) for one of the shot blast units, identified as 420, 421, or 422, within 180 days of the issuance of this permit (039-31002-0050).
- (b) Testing shall be conducted utilizing methods approved by the Commissioner. Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Littler Diecast Coporation
Address:	400 West Walnut Street
City:	Albany, Indiana 47320
Phone #:	765-789-4456
MSOP #:	M035-31002-00050

I hereby certify that Littler Diecast Coporation is:

still in operation.

no longer in operation.

I hereby certify that Littler Diecast Coporation is:

in compliance with the requirements of MSOP M035-31002-00050.

not in compliance with the requirements of MSOP M035-31002-00050.

Authorized Individual (typed):
Title:
Signature:
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:

MALFUNCTION REPORT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Mail to: Permit Administration and Support Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Littler Diecast Coporation
400 West Walnut Street
Albany, Indiana 47320

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)
4. I hereby certify that Littler Diecast Coporation 400 West Walnut Street, Albany, Indiana 47320, completed construction of the aluminum die casting facility, melting only clean charge on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on October 3, 2011 and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. M035-31002-00050, Plant ID No. 035-00050 issued on _____.
5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature _____
Date _____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana
on this _____ day of _____, 20____. My Commission expires: _____.

Signature _____
Name _____ (typed or printed)

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

Technical Support Document (TSD) for a New Source Construction and
Minor Source Operating Permit (MSOP)

Source Description and Location

Source Name: Littler Diecast Corporation
Source Location: 400 West Walnut Street, Albany, IN 47320
County: Delaware
SIC Code: 3363 (Aluminum Die Casting)
Operation Permit No.: 035-31002-00050
Permit Reviewer: Jack Harmon

On October 3, 2011, the Office of Air Quality (OAQ) received an application from Littler Diecast Corporation related to the construction and operation of an existing stationary aluminum die casting facility, melting only clean charge.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Delaware County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective January 3, 2006, for the Muncie area, including Delaware County, 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. Delaware 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) **PM_{2.5}**
 Delaware County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration

(PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
Delaware 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.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of Permitted Emission Units

There are no permitted units at this facility.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

- (a) One (1) natural gas-fired holding furnace, identified as 502, installed in 1954, with a maximum heat input capacity of 0.3 MMBtu/hr, with a maximum throughput capacity of 175 lb/hr clean aluminum and a maximum flux throughput of 0.021 lb/hr, using no controls, and exhausting internally.
- (b) One (1) natural gas-fired reverberatory melting furnace, identified as 501, installed in 1982, with a maximum heat input capacity of 4.0 MMBtu/hr, with a maximum throughput capacity of 1000 lb/hr clean aluminum and a maximum flux throughput of 0.333 lb/hr, using no controls, and exhausting through stack F501.
- (c) One (1) natural gas-fired stack melting furnace, identified as 500A, installed in 2004, with a maximum heat input capacity of 2.8 MMBtu/hr, with a maximum throughput capacity of 3600 lb/hr clean aluminum and a maximum flux throughput of 0.417 lb/hr, using no controls, and exhausting through stack F500A.
- (d) One (1) natural gas-fired stack melting furnaces, identified as 525, installed in 2005, with a maximum heat input capacity of 3.0 MMBtu/hr, with a maximum throughput capacity of 4000 lb/hr clean aluminum and a maximum flux throughput of 0.0.833 lb/hr, using no controls, and exhausting through stack F525M.
- (e) One (1) natural gas-fired holding furnace, identified as 525, installed in 2005, with a maximum heat input capacity of 2.4 MMBtu/hr, with a combined maximum throughput capacity of 4000 lb/hr clean aluminum, using no controls, and exhausting through stacks F525H.
- (f) One (1) shot blast machine, identified as 420, installed in 2010, with 7.5 HP motor, with a maximum throughput of 11,400 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.
- (g) One (1) shot blast machine, identified as 421, installed in 2010, with 15.0 HP motor, with a maximum throughput of 22,800 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.

- (h) One (1) shot blast machine, identified as 422, installed in 2010, with 15.0 HP motor, with a maximum throughput of 19,680 lb/hr of product and shot, with an air wash separator used for recycling shot, controlled by a dust collector, exhausting through stack SBDC.

Note: Each shot blast machine has a dust collector, but all exhausting through one stack.
- (i) One (1) die casting operation, consisting of eighteen (18) cells, identified as ADC, installed in 2010, with a combined maximum throughput of 8,600 lb/hr, using no controls, and exhausting inside the building.
- (j) One (1) sand polishing, consisting of two (2) polishing lathe cells, identified as 226, installed in 2010, with a maximum capacity of 0.07 lb/hr combined throughput, controlled by a dust collector, exhausting through stack PLDC, and using machining coolant identified as CF, with a combined maximum throughput of 810 gallons of coolant per year, exhausting inside the building.
- (k) One (1) Die Lube Process, with a maximum product throughput of 4,620 gallons per year, using no controls, exhausting inside the building.
- (l) Eighteen (18) natural gas-fired heaters, with a combined maximum heat input capacity of 14.29 MMBtu/hr, using no controls, and exhausting through a stack. (Appendix A of this Technical Support Document (TSD) lists each unit and its corresponding stack vent.)
- (m) Three (3) cooling towers, consisting of the following:
 - (1) One (1) West 1 Cooling Tower, identified as ECT1, with a maximum throughput of 215 gallons per minute, exhausting through stack ECT1;
 - (2) One (1) West 2 Cooling Tower, identified as ECT2, with a maximum throughput of 215 gallons per minute, exhausting through stack ECT2;
 - (3) One (1) East 1 Cooling Tower, identified as ECT3, with a maximum throughput of 450 gallons per minute, exhausting through stack ECT3.
- (n) One (1) hydraulic fluid storage tank, identified as HF, with a maximum storage capacity of 2,500 gallons, and a maximum throughput capacity of 20,000 gallons per year, exhausting internally.
- (o) Fugitive dust source from paved roads.

“Integral Part of the Process” Determination

The applicant has submitted the following information to justify why the dust collectors controlling particulate emissions from the shot blast units should be considered an integral part of the process:

- (a) The material that is removed from the castings and that has gone through the wash separator, is fine particulate matter, comprised of dry aluminum dust that is highly combustible. The aluminum dust is regulated by OSHA (Occupational Safety and Health Administration) and NFPA (National Fire Protection Association). The fact that the dust collectors are required by OSHA and NFPA makes the dust collector systems for the shot blast integral to the process.
- (b) IDEM, OAQ has evaluated the information submitted and has determined that the dust collectors are not considered an integral part of the shot blast. This determination is based on the fact that, although the controls may be required by other governmental agencies, that does not automatically make the controls integral to the process. For a control device to be considered as integral, there must be a reason, other than pollution control, for the control device, and there must be significant economic benefits for the controls, such as significant product recovery. In the instance of these control devices, each shot blast machine has a product recovery system, prior to dust collection, to re-use the media, and the product recovery process is separate from

the control devices themselves. Therefore, there is no significant economic benefit from the use of the dust collectors themselves. Finally, although the control devices are required by other governmental agencies, the primary purposes of these control devices are still that of pollution control. If the dust collectors were not in place, the particulate matter generated by the process would be released to the atmosphere as pollution. Therefore, dust collectors are not considered as integral to the process, and the permitting level will be determined using the potential to emit before the dust collectors.

Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	81.15
PM10 ⁽¹⁾	81.08
PM2.5	80.83
SO ₂	0.45
NO _x	13.10
VOC	7.19
CO	10.85
GHGs as CO ₂ e	15,591.63

(1) 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".

HAPs	Potential To Emit (tons/year)
Hexane	0.232
Formaldehyde	0.008
TOTAL HAPs	0.240

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of PM, PM10, and PM2.5 are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is 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.

- (c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

PTE of the Entire Source After Issuance of the MSOP

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of MSOP (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Melt furnaces – Process Emissions	21.14	21.14	21.14	0.00	0.00	3.84	0.00	0.00	0.0	0.0
Shot Blast***	57.49	57.49	57.49	0.00	0.00	0.00	0.00	0.00	0.0	0.0
Die Casting	0.00	0.00	0.00	0.38	0.19	2.64	0.00	0.00	0.0	0.0
Sand Polish Operation	0.28	0.28	0.28	0.00	0.00	negl.	0.00	0.00	0.0	0.0
Die Lube Process	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.0	0.0
Combustion – Melt Furnaces	0.13	0.51	0.51	0.04	6.66	0.37	5.59	8037.74	1.26E-01	1.20E-01 (Hexane)
Combustion – Other Facilites	0.12	0.48	0.48	0.04	6.26	0.34	5.26	7553.89	1.18E-01	1.13E-01 (Hexane)
Cooling Towers	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.0	0.0
Fugitive Emissions	1.08	0.28	0.03	0.00	0.00	0.00	0.00	0.00	0.0	0.0
Total PTE of Entire Source	81.15	81.08	80.83	0.45	13.10	7.19	10.85	15591.63	0.240	0.232 (Hexane)
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA
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". **The 100,000 CO ₂ e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD. *** Emissions from shot blast were calculated without controls, and were determined in this review to not be integral to the process. (See "Integral to the Process" Determination Section above.)										

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Primary Aluminum Reduction

- Plants, 40 CFR 60, Subpart S, are not included for this proposed revision, since this source does not manufacture aluminum. Therefore, the requirements of 40 CFR 60, Subpart S do not apply.
- (b) The requirements of the New Source Performance Standard for Ferroalloy Production Facilities, 40 CFR 60, Subpart Z are not included for this proposed revision, since this source does not operate an electric submerged arc furnace. Therefore, the requirements of 40 CFR 60, Subpart Z do not apply.
 - (c) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Primary Aluminum Reduction Plants, 40 CFR 63.840, Subpart LL, are not included in this permit because the source is not a primary aluminum reduction plant.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production, 40 CFR 63, Subpart RRR, are not included in this permit because it does not meet the definition of a secondary aluminum production facility. The definition of a secondary aluminum production states that for purposes of this subpart, aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are clean charge, customer returns, or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns. This source is a die casting process that melts only clean charge, customer returns or internal scrap and does not operate a sweat furnace, thermal chip dryer or scrap dryer/delacquering kiln/decoating kiln.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Primary Nonferrous Metals at Area Source - Zinc, Cadmium, or Beryllium, 40 CFR 63, Subpart GGGGGG, are not included in this permit because this facility is not a zinc, cadmium, or beryllium production facility.
- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Nonferrous Metals Processing - Area Sources, 40 CFR 63, Subpart TTTTTT, are still not included in this permit because it does not meet the definition of a brass or bronze ingot making facility, or a magnesium processing facility, or a zinc processing plant.
- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries, 40 CFR 63, Subpart ZZZZZZ, are still not included in this permit because die casting operations in which only clean charge is melted are excluded from this rule.
- (i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries, 40 CFR 63, Subpart EEEEE, are still not included in this permit because this source is not an iron or steel foundry operation and is not a major source of HAPs. Therefore, the requirements of 40 CFR 63, Subpart EEEEE do not apply.
- (j) There are no other 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)

- (k) 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 limited to 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 source:

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated criteria pollutants are less than 250 tons per year, the potential to emit greenhouse gases (GHGs) is less than 100,000 tons of CO₂e per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (c) 326 IAC 2-3 (Emission Offset)
This existing source is not a major stationary source, under Emission Offset (326 IAC 2-3), because this source is located in an attainment county. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is 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 2-4.1.
- (e) 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.
- (f) 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.
- (g) 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.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the fugitive paved roads do not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, the requirements of 326 IAC 6-5 do not apply.

Melting Furnaces

- (i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the melting furnace operation shall not exceed the following pounds per hour when operating at corresponding process weight rates, in tons per hour, as indicated in the table below.

Emission Unit	Aluminum Throughput (Lbs. per Hr.)	Flux Throughput (Lbs. per Hr.)	Total Process Weight Rate (Lbs. per Hr.)	Total Process Weight Rate (Tons per Hr.)	PM Emissions Limit (Pounds per Hour)
Melt Furnace 502	175.0	0.021	175.021	0.0875	0.80
Melt Furnace 501	1000.0	0.333	1000.333	0.5002	2.58
Melt Furnace 500A	3600.0	0.417	3600.417	1.8002	6.08
Melt Furnaces 525	4000.0	0.833	4000.833	2.0004	6.53

Total Process Weight Rate tons/hr = aluminum and flux throughput lb/hr/2000 lbs

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:

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

There are no control devices associated with the melting furnaces.

Shot Blast Operations

- (j) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the shot blast operation shall not exceed the following pounds per hour when operating at corresponding process weight rates, in tons per hour, as indicated in the table below.

Shot Blast Unit	Casting and Shot Throughput (Lbs. per Hr.)	Total Process Weight Rate (Tons per Hr.)	PM Emissions Limit (Pounds per Hour)
Shot Blast Unit 420	11,400	5.70	13.15
Shot Blast Unit 421	22,800	11.40	20.93
Shot Blast Unit 422	19,680	9.84	18.97

Total Process Weight Rate tons/hr = casting and shot throughput lb/hr/2000 lbs

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:

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

Emissions calculations are shown in Appendix A of this Technical Support Document. The potential to emit from each of the shot blast units is less than the limits in the table above.

Therefore, the source can comply with these limits without the use of control devices.

Die Casting Operation

- (k) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
 The unlimited VOC potential emissions from the die casting operation are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.
- (l) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
 The die casting operation is a closed process, and there are no particulate matter (PM) emissions. Therefore, the requirements of 326 IAC 6-3-2 do not apply.

Sand Polish Operation

- (m) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
 The unlimited VOC potential emissions from the sand polish operation are negligible and are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

Die Lube Process

- (n) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
 There is no VOC content used in the die lube process, and therefore, no VOC emissions. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

Cooling Towers

- (o) Pursuant to 326 IAC 6-3-1(b)(11), (Particulate Emission Limitations for Manufacturing Processes), the noncontact cooling towers are exempt from this rule; therefore, the requirements of 326 IAC 6-3-2 do not apply.

Entire Source

- (p) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
 The unlimited VOC potential emissions from the entire source are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply.
- (q) There are no other 326 IAC 8 Rules that are applicable to the source.

Compliance Determination, Monitoring and Testing Requirements
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- (a) There are no compliance determination and monitoring requirements applicable to the shot blast units because the controls for these units are not needed to comply with the applicable limits.
- (b) The testing requirements applicable to this source are as follows:

Shot Blast Machines

Testing Requirements				
Emission Unit	Stack ID	Pollutant	Timeframe for Testing	Frequency of Testing
Shot Blast Machine 420	Stack SBDC	PM, PM10, PM2.5	180 days after issuance of the permit	Once*
Shot Blast Machine 421	Stack SBDC			
Shot Blast Machine 422	Stack SBDC			

Testing of these units is necessary because an emission factor of 0.35 pound of PM per

horsepower-hour was used because of the manufacturer's recommendation. One-time testing is necessary to confirm these emission factors.

*The shot blast units are similar, and they share a common exhaust stack. Therefore, the Permittee shall perform PM, PM10, and PM2.5 testing for one of the shot blast units, identified as 420, 421, or 422, within 180 days of the issuance of this permit (039-31002-00050). Testing shall be conducted utilizing methods as approved by the Commissioner. Section C - Performance Testing contains the Permittee's obligation with regard to the testing required by this condition.

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 October 3, 2011.

The operation of this source shall be subject to the conditions of the attached proposed MSOP No. 035-31002-00050. The staff recommends to the Commissioner that this MSOP be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Jack Harmon 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) 233-4228 or toll free at 1-800-451-6027 extension 3-4228.
- (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.in.gov/idem

**Appendix A: Emission Calculations
Uncontrolled Emissions Summary**

Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Permit Reviewer: Jack Harmon
Date: 2012

Uncontrolled Emissions (tons per year)											
Emissions Process	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHG, as CO2e	Total HAPs	Worst HAP	Worst HAP
Furnaces - Melt Process	21.14	21.14	21.14	0.00	0.00	3.84	0.00	0.00	0.00E+00	0.00E+00	N/A
Shot Blast	57.49	57.49	57.49	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	N/A
Die Casting Operation	0.00	0.00	0.00	0.38	0.19	2.64	0.00	0.00	0.00E+00	0.00E+00	N/A
Sand Polish Operation	0.28	0.28	0.28	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	N/A
Die Lube Process	0.88	0.88	0.88	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	N/A
Process Heaters - Combustion	0.13	0.51	0.51	0.04	6.66	0.37	5.59	8037.74	1.26E-01	1.20E-01	Hexane
Others - Combustion	0.12	0.48	0.48	0.04	6.26	0.34	5.26	7553.89	1.18E-01	1.13E-01	Hexane
Cooling Towers	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	N/A
Fugitive Paved and Unpaved	1.08	0.28	0.03	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00	N/A
Total Uncontrolled Emisions	81.15	81.08	80.83	0.45	13.10	7.19	10.85	15591.63	0.24	2.32E-01	Hexane

**Appendix A: Emission Calculations
Uncontrolled Emissions Summary**

Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Permit Reviewer: Jack Harmon
Date: 2012

Melt Furnace	Melt Rate (lb/hr)	Flux Rate (lb/hr)	Total (Lb/hr)	Flux/day
502	175	0.021	175.0	0.5
501	1000	0.333	1000.3	8
500A	3600	0.417	3600.4	10
525	4000	0.833	4000.8	20
TOTAL	8775	1.604	8776.6	

Melt Furnaces 502, 501, 500A, 525 **Melting Process Emissions**

TYPE OF MATERIAL	Maximum:	Throughput			Uncontrolled						
		LBS/HR	1 TON/2000 lbs	TON/HR	PM lbs/ton Produced	PM10/PM2.5 lbs/ton Produced	SOx lbs/ton Produced	NOx lbs/ton Produced	VOC lbs/ton Produced	CO	HAPs
Aluminum + Flux (8775 lbs alum + 1.604 lb flux)		8776.6	2000	4.388	1.10	1.10	--	--	0.20	0	0
Potential Emissions lbs/hr		4.83	4.83	--	--	--	--	0.9	0.00		
Potential Emissions lbs/yr		42285.68	42285.68	--	--	--	--	7688.31	0.00	0.00	
Potential Emissions tons/year		21.14	21.14	0.00	0.00	0.00	0.00	3.84	0.00	0.00	

Source of Emission Factors: STAPPA/ALAPCO Handbook, Section 11, approved for use for clean charge furnaces.
 These emission factors include emissions utilizing cover flux and wall flux.
 Fluxes do not contain HAPs.

Methodology:

Potential emissions (lbs/hr) = emission factor (lb/ton) x throughput (tons/hr)
 Potential emissions (lb/yr) = potential emissions (lb/hr) x 8760 (hrs/yr)
 Potential emissions (tons/yr) = potential emissions (lb/yr) / 2000 (lb/ton)

**Appendix A: Emission Calculations
Uncontrolled Emissions Summary**

Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Pit ID: 035-00050
Permit Reviewer: Jack Harmon
Date: 2012

Shot Blast Emissions							
Unit ID	Emission Factor (PM, PM10, PM2.5)	EF Units	HP	PTE at Blast Chamber (lb/hr)	PTE Total (tons/yr)	Collector Efficiency	PTE After Collector (tons/yr)
420	0.35	lb/hp/hr	7.5	2.625	11.4975	99.90%	0.0114975
421	0.35	lb/hp/hr	15	5.25	22.995	99.90%	0.022995
422	0.35	lb/hp/hr	15	5.25	22.995	99.90%	0.022995
Total					57.4875		0.0574875

Emission factors provided by manufacturer of blast equipment, and has been conditionally accepted, but OAQ will require a test to confirm.

Integral to the Process claim was evaluated for the control device for this operation and determined to not be considered as integral. Therefore, potential to emit was based without consideration of controls.

Methodology:

PM PTE (lb/hr) - emission factor (lb/hp/hr) x HP rating

PM PTE (ton/yr) = PM PTE (lb/hr) x (1-% returned) / 2000 (lb/hr)

**Appendix A: Emission Calculations
Uncontrolled Emissions Summary**

**Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Permit Reviewer: Jack Harmon
Date: 2012**

Sanding and Polishing Machine 226

Sanding Hours Reported 9/10-9/11	1538	hrs
Dust Collected 9/10-9/11	100	lbs
Emission Factor	0.06502	lbs/hr
	569.5709	lbs/yr
PM PTE	0.284785	tons/yr

Max throughput / yr	810	gallons
VOC content (lb/gal)	0.00	
VOC PTE (lb/yr)	0.00	lb/yr
VOC PTE	0.00	tons/yr.

PM assumed to be equal to PM10, PM2.5

Sanding and Polishing operation emissions based on emission factor times 8760 hours per year.

Emission factors based on a one-year mass balance trial at the source, and data was provided by source.

PM emissions (lbs/yr) = emission factor (lb/hr) x 8760 (hrs/yr)

PM PTE (tons/yr) = PM emissions (lbs/hr) / 2000 (lb/ton)

VOC content per MSDS Sheets, supplied by source.

**Appendix A: Emission Calculations
Emissions from the Die Casting Process**

**Company Name: Littler Diecast Corporation
Address: 400 West Walnut Street, Albany, Indiana 47320
FESOP Renewal No.: 035-31002-00050
Reviewer: Jack Harmon**

Max. Al Input
tons/hr

Potential Throughput
MMCF/yr

4.3

8600 lb/hr maximum capacity

Emission Factor in lbs/ton	Pollutant					
	PM*	PM10*	SO ₂	NO _x	VOC	CO
Potential to Emit in tons/yr	-	-	0.02	0.01	0.14	-
	0.0	0.0	0.38	0.19	2.6	0.0

Note: Emission factors are from FIRE, Version 6.24, for Aluminum Pouring/Casting (SCC 30400114).
IDEM, OAQ, recognizes that there are no particulate emissions from the die casting process.

Methodology

Potential to Emit (tons/yr) = Max. Al Input (tons/hr) x Emission Factor (lbs/ton) x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations
Uncontrolled Emissions Summary**

Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Permit Reviewer: Jack Harmon
Date: 2012

Die Lube PM	
4620	Total Gal Purchased / yr
1	SG
8.33	lb/gal
30.00%	% Solids
66.00%	% Runoff To Waste Water
33.33%	% Left On Die
50.00%	% Flashoff
74.25%	Capacity

1308.4764	lbs of PM	Actual Emissions
0.20117	lbs/hr	Potential Emissions Considering Correction Up To 100% Capacity
0.88113	tons/yr	Potential Emissions Considering Correction Up To 100% Capacity

Material contains no VOC materials.

Of the material applied, conservative 66% runs off to waste stream to be discarded, leaving conservatively 33%. Manufacturer of the process estimates that 50% will flashoff as emissions. Based on data from mass balance trials and MSDS sheets provided by source, and factored up to maximum capacity of the process.

PM presumed to be equal to PM10, PM2.5.

$PTE\ PM\ (lb/hr) = PM\ emissions\ at\ running\ capacity \times 8760\ hrs/yr / \% \text{ capacity}$

$PM\ PTE\ (ton/yr) = PM\ PTE\ (lb/hr) \times 8760\ 9hr/yr / 2000\ (lb/ton)$

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

Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Reviewer: Jack Harmon
Date: 2012

Process Heaters	MMBtu/hr	Stack
501	4.00	F501
500A	2.80	F500A
525	5.40	F525M, F525H
502	3.00	(Internal)
Total	15.20	

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
15.20	1000	133.2

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.1	0.5	0.0	6.7	0.4	5.6

*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

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

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

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

See page 2 for HAPs emissions calculations.

updated 12/10

Appendix A: Emissions Calculations

Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions
Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Reviewer: Jack Harmon
Date: 2012

HAPs - Organics						Totals
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	
Potential Emission in tons/yr	1.398E-04	7.989E-05	4.993E-03	1.198E-01	2.264E-04	1.253E-01

HAPs - Metals						Totals
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	3.329E-05	7.323E-05	9.321E-05	2.530E-05	1.398E-04	3.648E-04

Methodology is the same as page 1.

Totals 1.256E-01

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.
 See Page 3 for Greenhouse Gas calculations.

updated 12/10

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions
Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Reviewer: Jack Harmon
Date: 2012

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2 120000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	7989.12	0.1531248	0.1464672
Summed Potential Emissions in tons/yr	7989.419592		
CO2e Total in tons/yr	8037.740		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
 Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

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

Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Reviewer: Jack Harmon
Date: 2012

Other Heaters	MMBtu/hr	Stack
SH09	8.530	SH08
SH08	3.030	SH09
HC01	0.140	HC01
HC02	0.115	HC02
SH01	0.400	SH01
SH02	0.120	SH02
SH03	0.120	SH03
SH04	0.120	SH04
SH05	0.120	SH05
SH06	0.115	SH06
SH07	0.200	SH07
HC04	0.650	(Internal)
SH10	0.090	SH10
SH14	0.150	SH14
SH13	0.100	SH13
SH12	0.090	SH12
SH11	0.070	SH11
HC03	0.125	HC03
Totals	14.29	

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
14.29	1000	125.1

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.1	0.5	0.0	6.3	0.3	5.3

*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
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

updated 12/10

Appendix A: Emissions Calculations

Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions
 Company Name: Littler Diecast Corporation
 Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
 Permit Number: 035-31002-00050
 Plt ID: 035-00050
 Reviewer: Jack Harmon
 Date: 2012

HAPs - Organics						Totals
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	
Potential Emission in tons/yr	1.314E-04	7.508E-05	4.693E-03	1.126E-01	2.127E-04	1.177E-01

HAPs - Metals						Totals
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	3.128E-05	6.883E-05	8.760E-05	2.378E-05	1.314E-04	3.429E-04

Methodology is the same as page 1.

Totals 1.181E-01

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.
 See Page 3 for Greenhouse Gas calculations.

updated 12/10

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Greenhouse Gas Emissions
Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Reviewer: Jack Harmon
Date: 2012

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2 120000	CH4 2.3	N2O 2.2
Potential Emission in tons/yr	7508.196	0.14390709	0.13765026
Summed Potential Emissions in tons/yr	7508.477557		
CO2e Total in tons/yr	7553.89		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
 Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
 Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
 CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

updated 12/10

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Company Name: Littler Diecast Corporation

Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320

Permit Number: 035-31002-00050

Plt ID: 035-00050

Reviewer: Jack Harmon

Date: 2012

Cooling Tower Liquid Drift	West 1	West 2	East 1	Total
Emission Factor (%)	0.0010%	0.0010%	0.0010%	
GPM	215	215	450	
Drift (GPY)	1130.04	1130.04	2365.20	4625.28

Cooling Tower PM-10	West 1	West 2	East 1	Total
TDS mg/L	1600	1600	1100	
TDS lb/gal	0.013352647	0.013352647	0.009179945	
lb/YR	15.08902521	15.08902521	21.71240546	51.8904559
ton/yr	0.007544513	0.007544513	0.010856203	0.02594523

Emission factor provided from EVAPCO manufacturer for this closed-loop system

Drift (gallons per year) = gallons per minute x emission factor x 8760 hours per year to arrive at total gallons per year.

TDS is Total Dissolved Solvent, based on manufacturer's data in mg/liter and converted to lb/gal

PM PTE (lb/yr) = TDS (mg/l) / (1000/2.54e0.3/231) x 0.0000022046226 x Drift (gal/yr)

PM PTE (ton/yr) = PM PTE (lb/yr) / 2000 (lb/ton)

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: Littler Diecast Corporation
Address City IN Zip: 400 West Walnut Street, Albany, Indiana 47320
Permit Number: 035-31002-00050
Plt ID: 035-00050
Reviewer: Jack Harmon
Date: 2012

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Semi Truck (entering plant) (one-way trip)	5.0	1.0	5.0	15.0	75.0	485	0.092	0.5	167.6
Semi Truck (leaving plant) (one-way trip)	5.0	1.0	5.0	40.0	200.0	385	0.073	0.4	133.1
UPS Truck (entering plant) (one-way trip)	1.0	1.0	1.0	5.0	5.0	220	0.042	0.0	15.2
UPS Truck (leaving plant) (one-way trip)	1.0	1.0	1.0	5.0	5.0	220	0.042	0.0	15.2
Totals			12.0		285.0			0.9	331.1

Average Vehicle Weight Per Trip = tons/trip
 Average Miles Per Trip = miles/trip

Unmitigated Emission Factor, $E_f = k \cdot [(s/12)^a] \cdot [(W/3)^b]$ (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	23.8	23.8	23.8	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E \cdot [(365 - P)/365]$ (Equation 2 from AP-42 13.2.2)

Mitigated Emission Factor, $E_{ext} = E \cdot [(365 - P)/365]$
 where P = days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f =$	6.55	1.67	0.17	lb/mile
Mitigated Emission Factor, $E_{ext} =$	4.30	1.10	0.11	lb/mile
Dust Control Efficiency =	0%	0%	0%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Semi Truck (entering plant) (one-way trip)	0.55	0.14	0.01	0.36	0.09	0.01	0.36	0.09	0.01
Semi Truck (leaving plant) (one-way trip)	0.44	0.11	0.01	0.29	0.07	0.01	0.29	0.07	0.01
UPS Truck (entering plant) (one-way trip)	0.05	0.01	0.00	0.03	0.01	0.00	0.03	0.01	0.00
UPS Truck (leaving plant) (one-way trip)	0.05	0.01	0.00	0.03	0.01	0.00	0.03	0.01	0.00
Totals	1.08	0.28	0.03	0.71	0.18	0.02	0.71	0.18	0.02

Methodology

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

Abbreviations

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



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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: John D Littler
Littler Diecast Corp
PO Box 56
Albany, IN 47320

DATE: September 5, 2012

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

SUBJECT: Final Decision
MSOP
035-31002-00050

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

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

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

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

Final Applicant Cover letter.dot 11/30/07



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

September 5, 2012

TO: Albany Community Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Littler Diecast Corporation
Permit Number: 035-31002-010050

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 9/4/2012 Littler Diecast Corp 035-31002-00050 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		John D Littler Littler Diecast Corp PO Box 56 Albany IN 47320 (Source CAATS)										
2		Delaware County Health Department 200 W Main St, County Bldg Room 207-309 Muncie IN 47305-2874 (Health Department)										
3		Delaware County Commissioners 100 West Main Street Muncie IN 47305 (Local Official)										
4		Albany Town Council 210 E. State St. Albany IN 47320 (Local Official)										
5		Albany Community Library 105 S Broadway St Albany IN 47320 (Library)										
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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