INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: January 4, 2007

RE: Independent Protection Company, Inc. / 039-23486-00612

FROM: Nisha Sizemore
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, Room 1049, 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.dot 03/23/06

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Mr. Thomas Craig
Independent Protection Company, Inc.
1607 South Main Street
Goshen, IN 46526
January 4, 2007

Re: 039-23486-00612
First Significant Revision to
MSOP 039-20230-00612

Dear Mr. Craig:

Independent Protection Company, Inc. was issued a permit on June 22, 2006 for a stationary foundry to manufacture small aluminum, bronze and copper parts used in the installation of lightning rod systems (Plant 1) and a plant for stranding copper cable for lightning rod systems and customizing the interior of specialty vehicles (Plant 2). An application requesting changes to this permit was received on August 9, 2006. Pursuant to the provisions of 326 IAC 2-6.1-6 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The revision consists of the addition of the following pollution control equipment to control particulate emissions from the crucible furnaces and the pouring/casting operation:

(a) One (1) dust collection system, identified as GS, which includes a cartridge-type dust collector, fume capture hoods for the two (2) crucible furnaces, and a mobile hood with a high temperature flex hose allowing the hood to travel with the operator as the molten metal is poured into the molds, exhausting through one (1) stack, identified as S1.

Pursuant to 326 IAC 2-6.1-6, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this revision and the following revised permit to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Trish Earls, c/o OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call at (973) 575-2555, ext. 3219 or dial (800) 451-6027, and ask for extension 3-6878.

Sincerely,
Original signed by
Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments
TE/EVP
cc: File - Elkhart County
U.S. EPA, Region V
Elkhart County Health Department
IDEM Northern Regional Office
Air Compliance Section Inspector – Paul Karkiewicz
Compliance Data Section
Administrative and Development
Technical Support and Modeling

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NEW SOURCE REVIEW and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

Independent Protection Company, Inc.
1607 South Main Street (Plant 1)
118 Lafayette Street (Plant 2)
Goshen, Indiana 46526

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

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.

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

Operation Permit No.: MSOP 039-20230-00612	
Issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: June 22, 2006 Expiration Date: June 22, 2011

First Significant Permit Revision No.: 039-23486-00612	
Issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: January 4, 2007 Expiration Date: June 22, 2011

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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 foundry to manufacture small aluminum, bronze and copper parts used in the installation of lightning rod systems (Plant 1) and a plant for stranding copper cable for lightning rod systems and customizing the interior of specialty vehicles (Plant 2).

Authorized Individual:	Rob Cripe, Vice President
Source Address:	1607 South Main Street, Goshen, Indiana 46526 (Plant 1) 118 Lafayette Street, Goshen, Indiana 46526 (Plant 2)
Mailing Address:	1607 South Main Street, Goshen, Indiana 46526
General Source Phone:	(574) 533-4116
SIC Code:	3643, 3713
County Location:	Elkhart
Source Location Status:	Nonattainment area for ozone under the 8-hour standard Attainment area for all other criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD and Nonattainment NSR; Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

Plant 1

(a) Two (2) natural gas-fired crucible furnaces, identified as F1 and F2, constructed prior to 1974, with a maximum combined capacity to melt 216 pounds per hour of bronze, 76 pounds per hour of clean charge aluminum, or 216 pounds per hour of copper, each with a maximum heat input capacity of 0.65 million British thermal units (MMBtu) per hour, with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which exhausts through one (1) stack, identified as S1. There is no flux being used in the furnaces;

(b) One (1) pouring/casting operation, identified as C, constructed prior to 1974, with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which exhausts through one (1) stack, identified as S1;

(c) One (1) sand mold making operation, identified as S, constructed prior to 1974, including a shakeout operation, handling a maximum of 0.5 tons of sand per hour, with a maximum resin coated sand usage rate of 0.9 pounds per hour, and a maximum bentonite usage rate of 0.5 pounds per hour, producing a maximum of 16 molds per hour, exhausting through one (1) stack, identified as S2;

(d) One (1) machining operation consisting of one (1) grinding station with three (3) hand grinders, identified as G, constructed prior to 1974, and one (1) Wheelabrator shot blaster, identified as W1, constructed in 2003, each with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, with one (1) cyclone for particulate control, exhausting through one (1) stack, identified as S3;

(e) One (1) natural gas-fired plant boiler, identified as B1, constructed prior to 1974, with a maximum heat input capacity of 0.13 MMBtu per hour, exhausting through one (1) stack, identified as S5;

(f) One (1) natural gas-fired office boiler, identified as B2, constructed prior to 1974, with a maximum heat input capacity of 0.1096 MMBtu per hour, exhausting through one (1) stack, identified as S6;

(g) One (1) lead coating line, identified as L, constructed prior to 1974, using a maximum of 0.721 pounds of lead/solder ingot per hour, a maximum of 0.09 pounds of HCl per hour, and a maximum of 0.1 pounds of zinc flux per hour to coat a maximum of 19 pounds of copper wire per hour, exhausting through one (1) stack, identified as S4;

(h) One (1) dust collection system, identified as GS, which includes a cartridge-type dust collector, fume capture hoods for the two (2) crucible furnaces, and a mobile hood with a high temperature flex hose allowing the hood to travel with the operator as the molten metal is poured into the molds, exhausting through one (1) stack, identified as S1.

Plant 2

(a) One (1) operation for the assembly of specialty vehicles, identified as MPV, constructed prior to 1974, processing a maximum of 0.046 vehicles per hour, using an air atomization spray coating application method to apply adhesives, and aerosol cans and brushing, wiping or dabbing to apply other coatings and cleaners, with hand held baffles to control particulate matter overspray emissions from the air atomization spray coating and aerosol cans, exhausting inside the building;

(b) Woodworking operations including the following:

(1) One (1) mill room woodworking operation, identified as WW1, constructed prior to 1974, including one (1) band saw, one (1) table saw, one (1) chop saw, and one (1) belt sander, with a maximum wood throughput of 11.16 pounds per hour, with a dust collector for particulate control, exhausting inside the building; and

(2) One (1) cabinet shop woodworking operation, identified as WW2, constructed prior to 1974, including one (1) table saw, one (1) chop saw, one (1) belt sander, one (1) routing table, one (1) pocket machine, and one (1) hinge table, with a maximum wood throughput of 3.17 pounds per hour, with a dust collector for particulate control, exhausting inside the building;

(c) Fifteen (15) natural gas-fired space heaters, identified as H1 through H15, with H1 through H14 all constructed prior to 1974, and H15 to be installed in 2006, with H1 and H2 each rated at 0.075 MMBtu per hour, H3 rated at 0.08 MMBtu per hour, H4 rated at 0.036 MMBtu per hour, H5 through H8 each rated at 0.10 MMBtu per hour, H9 rated at 0.06 MMBtu per hour, H10 through H13 each rated at 0.04 MMBtu per hour, H14 rated at 0.20 MMBtu per hour, and H15 rated at 0.10 MMBtu per hour, each exhausting through one (1) building vent, identified as V1 through V15, respectively; and

(d) One (1) Safety-Kleen cold cleaner degreaser, identified as MPC, constructed prior to 1974, using a maximum of 0.02 gallons per day of solvent containing no HAPs.

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 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, 039-20230-00612, 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.3 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.4 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.5 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.6 Property Rights or Exclusive Privilege

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

B.7 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. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual 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:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue,
Indianapolis, 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.10 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) within ninety (90) days after issuance of this permit, 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 Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to 039-20230-00612 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.12 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 ninety (90) days prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-6.1-7.

B.13 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 the certification 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least ninety (90) 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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 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][IC13-17-3-2][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.17 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification 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.18 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing.

(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.19 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 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 5-1-3 (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 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.5 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

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

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.7 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.8 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.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.10 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.11 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(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;

(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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.12 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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

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

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

C.13 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.14 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 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 Data Section, Office of Air Quality
100 North Senate Avenue
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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit 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 UNITS OPERATION CONDITIONS

Emissions Unit Description:

Plant 1

(a) Two (2) natural gas-fired crucible furnaces, identified as F1 and F2, constructed prior to 1974, with a maximum combined capacity to melt 216 pounds per hour of bronze, 76 pounds per hour of clean charge aluminum, or 216 pounds per hour of copper, each with a maximum heat input capacity of 0.65 million British thermal units (MMBtu) per hour, with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which exhausts through one (1) stack, identified as S1. There is no flux being used in the furnaces;

(b) One (1) pouring/casting operation, identified as C, constructed prior to 1974, with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which exhausts through one (1) stack, identified as S1;

(c) One (1) sand mold making operation, identified as S, constructed prior to 1974, including a shakeout operation, handling a maximum of 0.5 tons of sand per hour, with a maximum resin coated sand usage rate of 0.9 pounds per hour, and a maximum bentonite usage rate of 0.5 pounds per hour, producing a maximum of 16 molds per hour, exhausting through one (1) stack, identified as S2;

(d) One (1) machining operation consisting of one (1) grinding station with three (3) hand grinders, identified as G, constructed prior to 1974, and one (1) Wheelabrator shot blaster, identified as W1, constructed in 2003, each with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, with one (1) cyclone for particulate control, exhausting through one (1) stack, identified as S3;

(e) One (1) natural gas-fired plant boiler, identified as B1, constructed prior to 1974, with a maximum heat input capacity of 0.13 MMBtu per hour, exhausting through one (1) stack, identified as S5;

(f) One (1) natural gas-fired office boiler, identified as B2, constructed prior to 1974, with a maximum heat input capacity of 0.1096 MMBtu per hour, exhausting through one (1) stack, identified as S6;

(g) One (1) lead coating line, identified as L, constructed prior to 1974, using a maximum of 0.721 pounds of lead/solder ingot per hour, a maximum of 0.09 pounds of HCl per hour, and a maximum of 0.1 pounds of zinc flux per hour to coat a maximum of 19 pounds of copper wire per hour, exhausting through one (1) stack, identified as S4;

(h) One (1) dust collection system, identified as GS, which includes a cartridge-type dust collector, fume capture hoods for the two (2) crucible furnaces, and a mobile hood with a high temperature flex hose allowing the hood to travel with the operator as the molten metal is poured into the molds, exhausting through one (1) stack, identified as S1.

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

Emission Limitations and Standards

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the facilities listed below shall be limited as follows:

Emission Unit ID	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lb/hr)
Crucible Furnaces, F1 & F2	0.108	0.92
Sand Mold Making, S (includes sand handling and shakeout)	0.608 (sand and metal)	2.94
Machining Operations, G	0.108	0.92
Machining Operations, W1	0.108	0.92

The pounds per hour limitations were calculated using the following equation:

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

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

D.1.2 Particulate [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (e) (Particulate Emission Limitations for Sources of Indirect Heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from all facilities used for indirect heating purposes which began operation after June 8, 1972, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input. Therefore, particulate emissions from each of the two (2) boilers B1 and B2 shall not exceed 0.6 pounds of particulate matter per million British thermal unit heat input.

D.1.3 Secondary Aluminum NESHAP [40 CFR 63, Subpart RRR]

The crucible furnaces F1 and F2 shall only melt clean charge, customer returns, or internal scrap as defined under 40 CFR 63.1503. Therefore, the requirements of 40 CFR 63, Subpart RRR do not apply.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the crucible furnaces and the machining operation and any control devices.

Compliance Determination Requirements

D.1.5 Particulate Control

(a) In order to comply with condition D.1.1, the cyclone for particulate control shall be in operation and control emissions from the machining operation at all times that the grinders and shotblaster are in operation.

(b) In order to comply with condition D.1.1, the dust collection system, identified as GS, shall be in operation and control emissions from the crucible furnaces (F1 and F2) at all times that one or both of the crucible furnaces are in operation.

(c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust of the dust collection system, identified as GS, shall be performed daily during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the pressure drop across the cartridge-type dust collector used in conjunction with the crucible furnaces and the pouring/casting operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.8 Broken or Failed Cartridge Detection

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

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

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

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain daily records of visible emission notations of the stack exhaust of the dust collection system, identified as GS.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the pressure drop once per day during normal operation.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 2

(a) One (1) operation for the assembly of specialty vehicles, identified as MPV, constructed prior to 1974, processing a maximum of 0.046 vehicles per hour, using an air atomization spray coating application method to apply adhesives, and aerosol cans and brushing, wiping or dabbing to apply other coatings and cleaners, with hand held baffles to control particulate matter overspray emissions from the air atomization spray coating and aerosol cans, exhausting inside the building;

(b) Woodworking operations including the following:

(1) One (1) mill room woodworking operation, identified as WW1, constructed prior to 1974, including one (1) band saw, one (1) table saw, one (1) chop saw, and one (1) belt sander, with a maximum wood throughput of 11.16 pounds per hour, with a dust collector for particulate control, exhausting inside the building; and

(2) One (1) cabinet shop woodworking operation, identified as WW2, constructed prior to 1974, including one (1) table saw, one (1) chop saw, one (1) belt sander, one (1) routing table, one (1) pocket machine, and one (1) hinge table, with a maximum wood throughput of 3.17 pounds per hour, with a dust collector for particulate control, exhausting inside the building;

(c) Fifteen (15) natural gas-fired space heaters, identified as H1 through H15, with H1 through H14 all constructed prior to 1974, and H15 to be installed in 2006, with H1 and H2 each rated at 0.075 MMBtu per hour, H3 rated at 0.08 MMBtu per hour, H4 rated at 0.036 MMBtu per hour, H5 through H8 each rated at 0.10 MMBtu per hour, H9 rated at 0.06 MMBtu per hour, H10 through H13 each rated at 0.04 MMBtu per hour, H14 rated at 0.20 MMBtu per hour, and H15 rated at 0.10 MMBtu per hour, each exhausting through one (1) building vent, identified as V1 through V15, respectively; and

(d) One (1) Safety-Kleen cold cleaner degreaser, identified as MPC, constructed prior to 1974, using a maximum of 0.02 gallons per day of solvent containing no HAPs.

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

Emission Limitations and Standards

D.2.1 Particulate [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. This limit applies to the following facilities:

Woodworking operations including the following:

(1) One (1) mill room woodworking operation, identified as WW1, constructed prior to 1974, including one (1) band saw, one (1) table saw, one (1) chop saw, and one (1) belt sander, with a maximum wood throughput of 11.16 pounds per hour, with a dust collector for particulate control, exhausting inside the building; and

(2) One (1) cabinet shop woodworking operation, identified as WW2, constructed prior to 1974, including one (1) table saw, one (1) chop saw, one (1) belt sander, one (1) routing table, one (1) pocket machine, and one (1) hinge table, with a maximum wood throughput of 3.17 pounds per hour, with a dust collector for particulate control, exhausting inside the building.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control),for cold cleaner degreaser operations without remote solvent reservoirs existing as of July 1, 1990, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph Counties, the Permittee shall ensure that the following requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38OC) (one hundred degrees Fahrenheit (100OF));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38OC) (one hundred degrees Fahrenheit (100OF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38OC) (one hundred degrees Fahrenheit (100OF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9OC) (one hundred twenty degrees Fahrenheit (120OF)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the woodworking operation and its control devices.

Compliance Determination Requirements

D.2.4 Particulate Control

In order to comply with condition D.2.1, the dust collectors for particulate control shall be in operation and control emissions from the woodworking operations at all times that the woodworking operations are in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE 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:	**Independent Protection Company, Inc.**
Address:	**1607 South Main Street (Plant 1)** **118 Lafayette Street (Plant 2)**
City:	**Goshen, Indiana 46526**
Phone #:	**(574) 533-4116**
MSOP #:	**M039-20230-00612**

I hereby certify that Independent Protection Company, Inc. is
- ☐ still in operation.
- ☐ no longer in operation.

I hereby certify that Independent Protection Company, Inc. is
- ☐ in compliance with the requirements of MSOP 039-20230-00612.
- ☐ not in compliance with the requirements of MSOP 039-20230-00612.

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
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 ?_____, 100TONS/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 PERMI 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:

_____
_____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Minor Source Operating Permit

Source Background and Description

Source Name:	**Independent Protection Company, Inc.**
Source Location:	**1607 South Main Street, Goshen, IN 46526 (Plant 1)** **118 Lafayette Street, Goshen, IN 46526 (Plant 2)**
County:	**Elkhart**
SIC Code:	**3643, 3713**
Operation Permit No.:	**039-20230-00612**
Operation Permit Issuance Date:	**June 22, 2006**
Permit Revision No.:	**039-23486-00612**
Permit Reviewer:	**Trish Earls/EVP**

The Office of Air Quality (OAQ) has reviewed a revision application from Independent Protection Company, Inc. relating to the operation of a stationary foundry to manufacture small aluminum, bronze and copper parts used in the installation of lightning rod systems (Plant 1) and a plant for stranding copper cable for lightning rod systems and customizing the interior of specialty vehicles (Plant 2).

Source Definition

This source consists of two (2) plants:

(a) Plant 1 is located at 1607 South Main Street, Goshen, Indiana; and

(b) Plant 2 is located at 118 Lafayette Street, Goshen, Indiana.

Since the two (2) plants are located on adjacent properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source. The plant ID for the combined source is 039-00612.

History

On August 9, 2006, Independent Protection Company, Inc. submitted an application to the OAQ requesting to add a dust collection system to control particulate emissions from the two (2) natural gas-fired crucible furnaces, identified as F1 and F2, and from the pouring/casting operation, identified as C. The source also requested that the testing requirement for the crucible furnaces in condition D.1.5 of the MSOP be removed from the permit because the installation of the new dust collection system will ensure that the crucible furnaces are in compliance with the particulate emission limitations pursuant to 326 IAC 6-3-2.

New Emission Units and Pollution Control Equipment

The following pollution control equipment is being installed:

(a) One (1) dust collection system, identified as GS, which includes a cartridge-type dust collector, fume capture hoods for the two (2) crucible furnaces, and a mobile hood with a high temperature flex hose allowing the hood to travel with the operator as the molten metal is poured into the molds, exhausting through one (1) stack, identified as S1.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) MSOP 039-20230-00612, issued on June 22, 2006.

Justification for the Revision

The MSOP is being modified through a Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-6.1-6(i) because the revision involves the relaxation of a compliance determination requirement (i.e. stack testing).

Enforcement Issue

(a) There are no enforcement actions related to this revision.

(b) IDEM is aware that calculations performed during the review of MSOP 039-20230-00612, issued on June 22, 2006, indicated that the crucible furnaces F1 and F2 may not be in compliance with the particulate emission limitation pursuant to 326 IAC 6-3-2. The source was required to perform compliance stack testing for particulate emissions from the crucible furnaces within 180 days of issuance of the MSOP to demonstrate compliance with this limit. However, it has been concluded that since Independent Protection will be installing a dust collector control device on the crucible furnaces, and controlled PM emissions from the crucible furnaces will be below the allowable levels, it will not be necessary to require stack testing of the crucible furnaces before (or after) controls.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{o}F)
S1	Dust collector GS	18.0	1.33 x 1.67	6,300	70 - 180

Recommendation

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

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

A complete application for the purposes of this review was received on August 9, 2006.

Emission Calculations

See Appendix A of this document for detailed emission calculations (1 page). There have been no changes to the potential to emit of the emission units at this source. Calculations have been provided to show the controlled emissions from the crucible furnaces and pouring/casting.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	Attainment
PM-2.5	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Elkhart County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.

(c) Elkhart County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana.

(e) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

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

Pollutant	Emissions (tons/yr)
PM	25.1
PM-10	10.8
SO_2	0.26
VOC	3.28

Pollutant	Emissions (tons/yr)
CO	1.04
NO_x	1.24
Single HAP	< 10
Combination HAPs	< 25

(a) This existing source is **not** a major stationary source under 326 IAC 2-3 (Emission Offset) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater and it is in one of the 28 listed source categories.

(b) This existing source is **not** a major stationary source under 326 IAC 2-2 (PSD) because even though it is one of the 28 listed source categories, it does not emit 100 tons per year or greater of any regulated pollutants.

(c) These emissions were based on MSOP 039-20230-00612, issued on June 22, 2006.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

There are no changes to the Federal Rule Applicability as included in MSOP No. M039-20230-00612, issued on June 22, 2006 as a result of this revision.

State Rule Applicability – Entire Source

There are no changes to the State Rule Applicability – Entire Source determinations as included in MSOP No. M039-20230-00612, issued on June 22, 2006 as a result of this revision.

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the facilities listed below shall be limited as follows:

Emission Unit ID	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lb/hr)
Crucible Furnaces, F1 & F2	0.108	0.92
Sand Mold Making, S (includes sand handling and shakeout)	0.608 (sand and metal)	2.94
Machining Operations, G	0.108	0.92
Machining Operations, W1	0.108	0.92

The pounds per hour limitations were calculated using the following equation:

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

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

The dust collector GS shall be in operation at all times the crucible furnaces F1 and F2 are in operation, in order to comply with this limit.

The cyclone exhausting through stack S3 shall be in operation at all times the machining operations are in operation, in order to comply with this limit.

There are no other changes to the State Rule Applicability – Individual Facilities determinations as included in MSOP No. M039-20230-00612, issued on June 22, 2006 as a result of this revision.

Changes Proposed

The changes listed below have been made to the MSOP 039-20230-00612 with additions in bold and deletions in ~~strikeout~~.

1. Section A.2 is revised to include the new dust collection system and associated exhaust stack which will also be designated S1 as follows:

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

Plant 1

(a) Two (2) natural gas-fired crucible furnaces, identified as F1 and F2, constructed prior to 1974, with a maximum combined capacity to melt 216 pounds per hour of bronze, 76 pounds per hour of clean charge aluminum, or 216 pounds per hour of copper, each with a maximum heat input capacity of 0.65 million British thermal units (MMBtu) per hour, **with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which** ~~and both exhausting~~ **exhausts** through one (1) stack, identified as S1. There is no flux being used in the furnaces;

(b) One (1) pouring/casting operation, identified as C, constructed prior to 1974, with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, **with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which** ~~exhausting through one (1) stack, identified as S2~~ **exhausts through one (1) stack, identified as S1;**

(c) One (1) sand mold making operation, identified as S, constructed prior to 1974, including a shakeout operation, handling a maximum of 0.5 tons of sand per hour, with a maximum resin coated sand usage rate of 0.9 pounds per hour, and a maximum bentonite usage rate of 0.5 pounds per hour, producing a maximum of 16 molds per hour, exhausting through one (1) stack, identified as S2;

(d) One (1) machining operation consisting of one (1) grinding station with three (3) hand grinders, identified as G, constructed prior to 1974, and one (1) Wheelabrator shot blaster, identified as W1, constructed in 2003, each with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, with one (1) cyclone for particulate control, exhausting through one (1) stack, identified as S3;

(e) One (1) natural gas-fired plant boiler, identified as B1, constructed prior to 1974, with a maximum heat input capacity of 0.13 MMBtu per hour, exhausting through one (1) stack, identified as S5;

(f) One (1) natural gas-fired office boiler, identified as B2, constructed prior to 1974, with a maximum heat input capacity of 0.1096 MMBtu per hour, exhausting through one (1) stack, identified as S6;

(g) One (1) lead coating line, identified as L, constructed prior to 1974, using a maximum of 0.721 pounds of lead/solder ingot per hour, a maximum of 0.09 pounds of HCl per hour, and a maximum of 0.1 pounds of zinc flux per hour to coat a maximum of 19 pounds of copper wire per hour, exhausting through one (1) stack, identified as S4;

(h) One (1) dust collection system, identified as GS, which includes a cartridge-type dust collector, fume capture hoods for the two (2) crucible furnaces, and a mobile hood with a high temperature flex hose allowing the hood to travel with the operator as the molten metal is poured into the molds, exhausting through one (1) stack, identified as S1.

***

2. Compliance monitoring requirements have been added to the permit because the dust collection system must operate properly in order to ensure compliance with the particulate emission limit pursuant to 326 IAC 6-3-2 for the crucible furnaces. Also, the stack testing requirement for the crucible furnaces has been removed since it is no longer required to demonstrate compliance. Section D.1 is revised as follows:

SECTION D.1 EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description:

Plant 1

(a) Two (2) natural gas-fired crucible furnaces, identified as F1 and F2, constructed prior to 1974, with a maximum combined capacity to melt 216 pounds per hour of bronze, 76 pounds per hour of clean charge aluminum, or 216 pounds per hour of copper, each with a maximum heat input capacity of 0.65 million British thermal units (MMBtu) per hour, **with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which** ~~and both exhausting~~ **exhausts** through one (1) stack, identified as S1. There is no flux being used in the furnaces;

(b) One (1) pouring/casting operation, identified as C, constructed prior to 1974, with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, **with particulate emissions controlled by one (1) dust collection system, identified as GS (described below), which** ~~exhausting through one (1) stack, identified as S2~~ **exhausts through one (1) stack, identified as S1;**

(c) One (1) sand mold making operation, identified as S, constructed prior to 1974, including a shakeout operation, handling a maximum of 0.5 tons of sand per hour, with a maximum resin coated sand usage rate of 0.9 pounds per hour, and a maximum bentonite usage rate of 0.5 pounds per hour, producing a maximum of 16 molds per hour, exhausting through one (1) stack, identified as S2;

(d) One (1) machining operation consisting of one (1) grinding station with three (3) hand grinders, identified as G, constructed prior to 1974, and one (1) Wheelabrator shot blaster, identified as W1, constructed in 2003, each with a maximum throughput capacity of 216 pounds per hour of bronze, 76 pounds per hour of aluminum, or 216 pounds per hour of copper, with one (1) cyclone for particulate control, exhausting through one (1) stack, identified as S3;

(e) One (1) natural gas-fired plant boiler, identified as B1, constructed prior to 1974, with a maximum heat input capacity of 0.13 MMBtu per hour, exhausting through one (1) stack, identified as S5;

(f) One (1) natural gas-fired office boiler, identified as B2, constructed prior to 1974, with a maximum heat input capacity of 0.1096 MMBtu per hour, exhausting through one (1) stack, identified as S6;

(g) One (1) lead coating line, identified as L, constructed prior to 1974, using a maximum of 0.721 pounds of lead/solder ingot per hour, a maximum of 0.09 pounds of HCl per hour, and a maximum of 0.1 pounds of zinc flux per hour to coat a maximum of 19 pounds of copper wire per hour, exhausting through one (1) stack, identified as S4;

(h) One (1) dust collection system, identified as GS, which includes a cartridge-type dust collector, fume capture hoods for the two (2) crucible furnaces, and a mobile hood with a high temperature flex hose allowing the hood to travel with the operator as the molten metal is poured into the molds, exhausting through one (1) stack, identified as S1.

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

Emission Limitations and Standards

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate from the facilities listed below shall be limited as follows:

Emission Unit ID	Process Weight Rate (tons/hr)	Allowable Particulate Emissions (lb/hr)
Crucible Furnaces, F1 & F2	0.108	0.92
Sand Mold Making, S (includes sand handling and shakeout)	0.608 (sand and metal)	2.94
Machining Operations, G	0.108	0.92
Machining Operations, W1	0.108	0.92

The pounds per hour limitations were calculated using the following equation:

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

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

D.1.2 Particulate [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (e) (Particulate Emission Limitations for Sources of Indirect Heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from all facilities used for indirect heating purposes which began operation after June 8, 1972, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input. Therefore, particulate emissions from each of the two (2) boilers B1 and B2 shall not exceed 0.6 pounds of particulate matter per million British thermal unit heat input.

D.1.3 Secondary Aluminum NESHAP [40 CFR 63, Subpart RRR]

The crucible furnaces F1 and F2 shall only melt clean charge, customer returns, or internal scrap as defined under 40 CFR 63.1503. Therefore, the requirements of 40 CFR 63, Subpart RRR do not apply.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the crucible furnaces and the machining operation and any control devices.

Compliance Determination Requirements

~~D.1.5 Testing Requirements [326 IAC 2-1.1-11]~~

~~During the period within 180 days after issuance of this MSOP, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM testing for the crucible furnaces exhausting through stack S1 while melting bronze utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.~~

D.1.6**5** Particulate Control

(a) In order to comply with condition D.1.1, the cyclone for particulate control shall be in operation and control emissions from the machining operation at all times that the grinders and shotblaster are in operation.

(b) In order to comply with condition D.1.1, the dust collection system, identified as GS, shall be in operation and control emissions from the crucible furnaces (F1 and F2) at all times that one or both of the crucible furnaces are in operation.

(c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust of the dust collection system, identified as GS, shall be performed daily during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the pressure drop across the cartridge-type dust collector used in conjunction with the crucible furnaces and the pouring/casting operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the dust collector is outside the normal range of 1.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.1.8 Broken or Failed Cartridge Detection

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

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

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

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain daily records of visible emission notations of the stack exhaust of the dust collection system, identified as GS.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the pressure drop once per day during normal operation.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

3. Due to the addition of compliance monitoring requirements to the permit, conditions C.10 and C.11 have been added to the permit as follows:

C.10 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.11 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(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;

(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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

The remaining conditions in section C have been re-numbered accordingly.

Conclusion

The operation of this stationary foundry to manufacture small aluminum, bronze and copper parts used in the installation of lightning rod systems (Plant 1) and a plant for stranding copper cable for lightning rod systems and customizing the interior of specialty vehicles (Plant 2) shall be subject to the conditions of the Significant Permit Revision No. 039-23486-00612.

Appendix A: Emission Calculations

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
118 Lafayette Street, Goshen, Indiana 46526
Permit Revision No.: 039-23486-00612
Plt ID: 039-00612
Reviewer: Trish Earls

Crucible Furnaces

		Maximum Throughput LBS/HR	TON/HR		
TYPE OF MATERIAL	Metal	216	0.108	Control Device:	Dust Collector
Aluminum, Bronze or Copper				Control Efficiency:	98.99%

	PM lbs/ton metal charged	PM10 lbs/ton metal charged	SOx lbs/ton metal charged	NOx lbs/ton metal charged	VOC lbs/ton metal charged	CO lbs/ton metal charged	Lead lbs/ton metal charged
	21	12.4	0.50	0.00	0.00	0.00	1.05
Potential Uncontrolled Emissions lbs/hr	2.27	1.34	0.05	0.00	0.00	0.0	0.11
Potential Uncontrolled Emissions tons/year	**9.93**	**5.87**	**0.24**	**0.00**	**0.00**	**0.00**	**0.50**
Potential Controlled Emissions lbs/hr	0.02	0.01	0.05	0.00	0.00	0.00	0.00
Potential Controlled Emissions tons/year	**0.10**	**0.06**	**0.24**	**0.00**	**0.00**	**0.00**	**0.01**

Note: Emission factors are from USEPA's FIRE version 6.24 for Charging a crucible furnace with Brass/Bronze, SCC#3-04-002-19. These represent the worst case emission factors for melting of the three metals listed.

Pouring/Casting

		Maximum Throughput LBS/HR	TON/HR		
TYPE OF MATERIAL		216	0.108	Control Device:	Dust Collector
Aluminum, Bronze or Copper				Control Efficiency:	89.99%

	PM lbs/ton metal charged	PM10 lbs/ton metal charged	SOx lbs/ton metal charged	NOx lbs/ton metal charged	VOC lbs/ton metal charged	CO lbs/ton metal charged	Lead lbs/ton metal charged
	4.2	2.06	0.02	0.01	0.14	0.00	0.21
Potential Uncontrolled Emissions lbs/hr	0.45	0.22	2.2E-03	1.1E-03	0.02	0.0	0.02
Potential Uncontrolled Emissions tons/year	**1.99**	**0.97**	**9.5E-03**	**4.7E-03**	**0.07**	**0.00**	**0.10**
Potential Controlled Emissions lbs/hr	0.05	0.02	2.2E-03	1.1E-03	0.02	0.0	0.00
Potential Controlled Emissions tons/year	**0.20**	**0.10**	**9.5E-03**	**4.7E-03**	**0.07**	**0.00**	**0.01**

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24.
The PM and PM10 emission factors are for pouring at a gray iron foundry since there is limited information on PM and PM10 emissions when pouring into sand molds at other types of foundry operations.
The Lead emission factor is estimated by multiplying the PM factor by the % content of lead in bronze (5%).