



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: June 22, 2006
RE: Independent Protection Company / 039-20230-00612
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 1/10/05



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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	
Original signed by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: June 22, 2006 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, and both exhausting 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, exhausting through one (1) stack, identified as S2;
- (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;

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.

Corrective Actions and Response Steps

C.10 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.11 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.12 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.13 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, and both exhausting 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, exhausting through one (1) stack, identified as S2;
- (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;

(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 Particulate Control

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.

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 or 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 - 317 233-5967**

**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 PERM 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: ____/____/19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ _____ 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**

Addendum to the
Technical Support Document for a
New Source Review and Minor Source Operating Permit

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
 Operation Permit No.: 039-20230-00612
 SIC Code: 3643, 3713
 Permit Reviewer: Trish Earls/EVP

On April 10, 2006, the Office of Air Quality (OAQ) had a notice published in the Goshen News, Goshen, Indiana, stating that Independent Protection Company, Inc. had applied for a New Source Construction and Minor Source Operating Permit (MSOP) to operate 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). The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review IDEM, OAQ has made the following changes to the MSOP (additions in bold, deletions in ~~strikeout~~):

1. On the cover page, the term NEW SOURCE CONSTRUCTION has been changed to NEW SOURCE REVIEW. "Review" covers both new sources yet to construct and CWOP/OWOP sources which IDEM reviews as new but will not construct.
2. Condition B.1, Permit No Defense, has been removed. A decision has been made to move the statements of this condition to the cover page. The following paragraph has been added to the cover page of the permit as follows:

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.
3. Condition B.3, Permit Term and Renewal, has been replaced by B.2 Permit Term, B.12 Termination of Right to Operate, and B.13 Permit Renewal.
4. The following conditions have been added to the permit: B.4, Enforceability, B.5, Severability, B.6, Property Rights or Exclusive Privilege, B.7, Duty to Provide Information, B.8, Certification, and B.15, Source Modification Requirement
5. Condition B.6, now re-numbered B.9, Annual Notification was revised to reflect the requirements of 326 IAC 2-6.1-5(a)(5).

6. Upon further review, IDEM has decided to remove (d) concerning nonroad engines from B.8 Permit Revision, now re-numbered B.14 and titled Permit Amendment or Revision. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.
7. Condition B.10, Transfer of Ownership or Operation, now re-numbered B.17 and titled Transfer of Ownership or Operational Control, has been revised.
8. Upon further review, IDEM has decided to include updates to further address and clarify the permit term and the term of the conditions. This includes the addition of the conditions: B.3, Term of Conditions [326 IAC 2-1.1-9.5] and B.11, Prior Permits Superseded [326 IAC 2-1.1-9.5]. Condition B.3, Effective Date of the Permit, and condition B.5, Modification to Permit, have been removed.
9. Condition C.6, Performance Testing, has been revised to remove the language regarding testing on new units since there are no new emission units being added:

The following sections B and C of the MSOP shown in ~~strikeout~~ have been removed and replaced with the sections shown in **bold** as follows:

SECTION B ~~GENERAL CONDITIONS~~

~~THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.~~

B.1 ~~Permit No Defense [IC 13]~~

~~This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.~~

B.2 ~~Definitions~~

~~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.3 ~~Effective Date of the Permit [IC13-15-5-3]~~

~~Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.~~

B.4 ~~Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]~~

~~This permit 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 of this permit do not affect the expiration date.~~

~~The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.~~

B.5 ~~Modification to Permit [326 IAC 2]~~

~~All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).~~

~~B.6 Annual Notification [326 IAC 2-6.1-5(a)(5)]~~

- ~~(a) Annual notification shall be submitted 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) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.~~
- ~~(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and 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, IN 46204-2251~~
- ~~(d) 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.7 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, maintain and implement Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:~~
- ~~(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 PMP's 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 PMP 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.8 — Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]~~

~~(a) — Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.~~

~~(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 46204-2254~~

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

~~(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)]~~

~~(d) — No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.~~

~~B.9 — Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2]
[IC 13-17-3-2][IC 13-30-3-1]~~

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

~~(a) — Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;~~

~~(b) — As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;~~

~~(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 processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;~~

~~(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~~

~~(c) — 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.10 — Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]~~

~~Pursuant to [326 IAC 2-6.1-6(d)(3)]:~~

- ~~(a) — In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch within thirty (30) days of the change.~~
- ~~(b) — The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).~~
- ~~(c) — IDEM, OAQ, shall issue a revised permit.~~

~~The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.~~

~~B.11 — 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.12 — 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

~~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 non-overlapping 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 2-7-1(34).~~

(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(e). 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

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

~~(a) — Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. 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.~~

~~(b) — The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual date.~~

~~(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ (and local agency) not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, (and local agency), 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

~~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 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 emissions unit 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 re-testing in one hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the re-testing deadline.~~

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

~~The response action documents submitted pursuant to this condition do not require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1.~~

Record Keeping and Reporting Requirements

~~C.11 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.12 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 when operation begins.~~

~~C.13 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, any quarterly or semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not 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 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.

Corrective Actions and Response Steps

C.10 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.11 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.12 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.13 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.**

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for 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
Permit Reviewer:	Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed an application from Independent Protection Company, Inc. relating to the operation of a 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.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

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, and both exhausting 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, exhausting through one (1) stack, identified as S2;

- (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;

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.

Emission Units and Pollution Control Equipment Removed from the Source

The following emission unit has been removed from the source:

- (a) One (1) natural gas-fired MPV boiler, identified as B3, constructed prior to 1974, with a maximum heat input capacity of 0.202 MMBtu per hour, exhausting through one (1) stack, identified as S7.

Existing Approvals

There have been no previous approvals issued to this source.

Enforcement Issue

- (a) IDEM is aware that the source did not apply for a Minor Source Operating Permit (MSOP) in a timely manner. IDEM is reviewing this matter and will take appropriate action.
- (b) IDEM is aware that equipment has been operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Unpermitted Emission Units and Pollution Control Equipment".

IDEM is reviewing this matter and will take appropriate action.

- (c) IDEM is aware that calculations indicate that the crucible furnaces F1 and F2 may not be in compliance with the following emission limitation:

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 allowable particulate emission rate from the two (2) crucible furnaces (F1 and F2) combined shall not exceed 0.92 pounds per hour when operating at a process weight rate of 216 pounds per hour.

IDEM is reviewing this matter and has taken appropriate action. The source shall be required to perform compliance stack testing for particulate emissions from the crucible furnaces exhausting through stack S1 within 180 days of issuance of this permit to demonstrate compliance with this limit.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
S1	Crucible Furnaces	18.0	2.5	10,000	180
S2	Casting/cooling & Sand Mold making	18.0	4.0	28,000	ambient
S3	Shotblasting & Grinding	18.0	2.0	21,000	ambient
S4	Lead Coating Line	18.0	3.0	20,000	ambient
S5	Plant Boiler	18.0	1.33	vent	180
S6	Office Boiler	18.0	0.5	vent	180
V1 – V15	Space heaters	20.0	0.5	vent	180

Recommendation

The staff recommends to the Commissioner that the construction and 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 October 7, 2004.

Emission Calculations

See Appendix A of this document for detailed emission calculations (11 pages).

Potential to Emit of the Source Before Controls

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

Pollutant	Potential to Emit (tons/yr)
PM	49.17
PM-10	21.79
SO ₂	0.26
VOC	3.28
CO	1.00
NO _x	1.19
Lead	1.30

HAPs	Potential to Emit (tons/yr)
Lead	Less than 10
HCl	Less than 10
Hexane	Less than 10
MEK	Less than 10
Toluene	Less than 10
Perchloro-ethylene	Less than 10
TCE	Less than 10
Xylenes	Less than 10
MDI	Less than 10
1,4-Dioxane	Less than 10
1,2-Epoxybutane	Less than 10
Total	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants are less than 100 tons per year and the potential to emit of PM is greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.

- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) **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.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM2.5	Attainment
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Basic 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) **Fugitive Emissions**
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2 or 2-3, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

New 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
CO	1.04
NO _x	1.24
Single HAP	< 10
Combination HAPs	< 25

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 100 tons per year or greater, it is in one of the 28 listed source categories, and no nonattainment pollutant is emitted at a rate of 100 tons per year or greater. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply and pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This source is 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 is the first air approval issued to this source.

Federal Rule Applicability

- (a) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60.40, Subpart D), were not included in this permit for the two (2) boilers (B1 and B2) because although the boilers were constructed after August 17, 1971, they are rated at less than 250 MMBtu per hour.

The requirements of the New Source Performance Standards, 326 IAC 12 (40 CFR 60.40a, Subpart Da, 40 CFR 60.40b, Subpart Db, and 40 CFR 60.40c, Subpart Dc), were not included in this permit for the two (2) boilers (B1 and B2) because the boilers were constructed prior to the applicability dates for all these rules and are rated at less than the applicable heat input capacities for all these rules.

- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD were not included in this permit for the two (2) boilers (B1 and B2) because they are not located at a major source of HAPs. Therefore, the requirements of this rule are not included in the permit.

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production, 40 CFR 63.1500 through 63.1519, Subpart RRR, are not included in the permit because this source is not a secondary aluminum production facility as defined in 40 CFR 63.1503. Pursuant to 40 CFR 63.1503, aluminum die casting facilities, aluminum foundries, and aluminum extrusion facilities are not considered to be secondary aluminum production facilities if the only materials they melt are clean charge, customer returns, or internal scrap, and if they do not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns. When using aluminum, this source only melts clean charge, customer returns, or internal scrap and does not operate sweat furnaces, thermal chip dryers, or scrap dryers/delacquering kilns/decoating kilns, therefore, it is not a secondary aluminum production facility as defined in the rule.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20, (40 CFR 63.460 through 63.468, Subpart T) are not included in the permit for the Safety-Kleen cold cleaner degreaser because this unit does not use a halogenated HAP cleaning solvent.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this permit.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source, which was constructed prior to 1974 and is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, is not subject to the requirements of 326 IAC 2-2 (PSD). The potential emissions of all pollutants are less than 100 tons per year, therefore, this source is not a major PSD source. The Wheelabrator shot blast unit and cyclone were replaced in kind with new units in December 2003. The potential emissions from the shot blast unit are less than the PSD significant modification thresholds for all pollutants and the source remains a minor PSD source.

326 IAC 2-3 (Emission Offset)

Elkhart County has been designated as nonattainment for the 8-hour ozone standard. However, since the potential to emit of VOC and NO_x are each less than 100 tons per year, this source is a minor source under 326 IAC 2-3, Emission Offset and is not subject to the requirements of this rule.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

The operation of this source will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Opacity Limitations)

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

State Rule Applicability – Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

The two (2) boilers (B1 and B2) are subject to the requirements of 326 IAC 6-2-3 since they are indirect heating facilities that were constructed prior to September 21, 1983. Pursuant to this rule, PM emissions from each boiler shall be limited using the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where:

- C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.
- Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input
- Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.
- N = Number of stacks in fuel burning operation.
- a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.
- h = Stack height in feet. Since the stack heights of the boiler stacks are different, this value was calculated using the equation listed in 326 IAC 6-2-3(a).

For each of the boilers B1 and B2, Pt is calculated as follows:

$$Pt = \frac{50 \times 0.67 \times 25}{76.5 \times 0.4416^{0.75} \times 3^{0.25}} = 15.36 \text{ lb/MMBtu}$$

However, pursuant to 326 IAC 6-2-3(e), particulate emissions from any facility used for indirect heating purposes which has 250 MMBtu per hour heat input or less and which began operation after June 8, 1972, shall in no case exceed 0.6 lb/MMBtu heat input. Therefore PM emissions from each of the two (2) boilers B1 and B2 shall not exceed 0.6 lb/MMBtu heat input. Potential PM emissions from each boiler are less than 0.6 lb/MMBtu, therefore, these boilers are in compliance with this rule.

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

Pursuant to 326 IAC 6-3-1(b)(15), the application of bulk adhesives using air atomization spray coating in the MPV assembly operation is not subject to the requirements of this rule because this operation uses less than 5 gallons per day of coating.

Pursuant to 326 IAC 6-3-1(b)(12), the application of aerosol coating products using disposable hand-held aerosol cans in the MPV assembly operation is not subject to the requirements of this rule.

Pursuant to 326 IAC 6-3-1(b)(8), the surface coating using brush coating in the MPV assembly operation is not subject to this rule.

Since there are no particulate emissions from the surface coating using wiping or dabbing in the MPV assembly operation, it is not subject to this rule.

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

Pursuant to 326 IAC 6-3-2, 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)	Potential or Controlled Emissions (lb/hr)	In compliance?
Crucible Furnaces, F1 & F2	0.108	0.92	2.27	No
Sand Mold Making, S (includes sand handling and shakeout)	0.608 (sand and metal)	2.94	2.15	Yes
Machining Operations, G	0.108	0.92	0.18	Yes
Machining Operations, W1	0.108	0.92	0.18	Yes

These emission limits are based on the following equation:

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

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

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.

Since potential particulate emissions from the crucible furnaces are greater than the allowable particulate emissions pursuant to 326 IAC 6-3-2, compliance stack testing for particulate emissions will be required while melting bronze (the worst case metal for emissions) within 180 days of permit issuance to determine compliance with the emission limit pursuant to 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.

The dust collectors for particulate control shall be in operation at all times the mill room and cabinet shop woodworking operations are in operation in order to comply with this limit.

The requirements of 326 IAC 6-3-2 were not included in the MSOP for the pouring/casting operation, C, and the lead coating line, L, because potential emissions are less than 0.551 pound per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), these operations are exempt from 326 IAC 6-3.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The requirements of 326 IAC 8-1-6 apply to facilities constructed after January 1, 1980 with potential VOC emissions of greater than 25 tons per year. None of the facilities at this source have potential VOC emissions of greater than 25 tons per year, therefore, the requirements of this rule do not apply.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The surface coating of metal parts in the specialty vehicle assembly operation, MPV, is not subject to the requirements of 326 IAC 8-2-9 because pursuant to 326 IAC 8-2-1(a)(3), facilities existing as of July 1, 1990 located in Elkhart County are exempt from 326 IAC 8-2-9 if actual emissions of VOC are less than 15 pounds per day. Potential VOC emissions from the surface coating of metal parts in the specialty vehicle assembly operation are less than 15 pounds per day, therefore, this operation is not subject to 326 IAC 8-2-9.

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-1(a), the requirements of 326 IAC 8-3-2 apply to cold cleaner degreasers existing as of January 1, 1980 located in Elkhart County which are located at sources with potential VOC emissions of 100 tons per year or greater and to cold cleaner degreasers constructed after January 1, 1980. Since this source has potential VOC emissions of less than 100 tons per year and the degreaser was constructed prior to 1980, the cold cleaner degreaser is not subject to 326 IAC 8-3-2.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

Pursuant to 326 IAC 8-3-1(b), the requirements of 326 IAC 8-3-5 apply to cold cleaner degreasers without remote solvent reservoirs existing as of July 1, 1990 located in Elkhart County. The cold cleaning operation at this source, which does not have a remote solvent reservoir, is subject to this rule.

- (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 or 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.

Conclusion

The operation of this 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 Minor Source Operating Permit 039-20230-00612.

Appendix A: Emission Calculations Summary

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
 118 Lafayette Street, Goshen, Indiana 46526
Operating Permit No.: M039-20230
Pit ID: 039-00612
Reviewer: Trish Earls

Uncontrolled Potential Emissions (tons/year)											
Emissions Generating Activity											
Pollutant	Crucible Furnaces	Pouring/Casting	Mold Sand Handling	Shakeout	Machining Operations	Lead Coating Line	Natural Gas Combustion	MPV Surface Coating	Woodworking	Unpaved Roadways	TOTAL
PM	9.93	1.99	7.88	1.51	16.08	0.00	0.02	0.99	9.83	0.94	49.17
PM10	5.87	0.97	1.18	1.06	1.60	0.00	0.09	0.99	9.83	0.20	21.79
SO2	0.24	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.26
NOx	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	1.19
VOC	0.00	0.07	0.00	0.57	0.00	0.00	0.07	2.57	0.00	0.00	3.28
CO	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
total HAPs	0.50	0.00	0.00	0.00	0.80	4.2E-03	0.02	1.42	0.00	0.00	2.74
worst case single HAP	(Lead) 0.50	0.00	0.00	0.00	(Lead) 0.80	(Lead) 0.0024	(Hexane) 0.02	(Hexane) 0.70	0.00	0.00	(Lead) 1.30
Total emissions based on rated capacity at 8,760 hours/year.											
Controlled Potential Emissions (tons/year)											
Emissions Generating Activity											
Pollutant	Crucible Furnaces	Pouring/Casting	Mold Sand Handling	Shakeout	Machining Operations	Lead Coating Line	Natural Gas Combustion	MPV Surface Coating	Woodworking	Unpaved Roadways	TOTAL
PM	9.93	1.99	7.88	1.51	1.61	0.00	0.02	0.25	0.98	0.94	25.11
PM10	5.87	0.97	1.18	1.06	0.16	0.00	0.09	0.25	0.98	0.20	10.76
SO2	0.24	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.26
NOx	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	1.19
VOC	0.00	0.07	0.00	0.57	0.00	0.00	0.07	2.57	0.00	0.00	3.28
CO	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
total HAPs	0.50	0.00	0.00	0.00	0.08	4.2E-03	0.02	1.42	0.00	0.00	2.02
worst case single HAP	(Lead) 0.50	0.00	0.00	0.00	(Lead) 0.08	(Lead) 0.0024	(Hexane) 0.02	(Hexane) 0.70	0.00	0.00	(Hexane) 0.72
Total emissions based on rated capacity at 8,760 hours/year, after control.											
Notes:											
1. Emissions from woodworking are based on emission calculations provided by Independent Protection shown on page 12 of 12.											

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
Operating Permit No.: M039-20230
Plt ID: 039-00612
Reviewer: Trish Earls

Crucible Furnaces		Maximum Throughput							
		LBS/HR	TON/HR						
TYPE OF MATERIAL		Metal							
Aluminum, Bronze or Copper		216	0.108						
	PM	PM10	SOx	NOx	VOC	CO	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	2.27	1.34	0.05	0.00	0.00	0.00	0.11		
Potential Controlled Emissions tons/year	9.93	5.87	0.24	0.00	0.00	0.00	0.50		

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						
Aluminum, Bronze or Copper		216	0.108			
	PM	PM10	SOx	NOx	VOC	CO
	lbs/ton metal charged					
	4.2	2.06	0.02	0.01	0.14	0.00
Potential Uncontrolled Emissions lbs/hr	0.45	0.22	2.2E-03	1.1E-03	0.02	0.0
Potential Uncontrolled Emissions tons/year	1.99	0.97	9.5E-03	4.7E-03	0.07	0.00
Potential Controlled Emissions lbs/hr	0.45	0.22	2.2E-03	1.1E-03	0.02	0.0
Potential Controlled Emissions tons/year	1.99	0.97	9.5E-03	4.7E-03	0.07	0.00

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.

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
Operating Permit No.: M039-20230
Pit ID: 039-00612
Reviewer: Trish Earls

Mold Sand Handling		Maximum Throughput					
		LBS/HR	TON/HR				
TYPE OF MATERIAL		1000	0.5				
Sand							
	PM lbs/ton sand	PM10 lbs/ton sand	SOx lbs/ton sand	NOx lbs/ton sand	VOC lbs/ton sand	CO lbs/ton sand	
	3.6	0.54	0.00	0.00	0.00	0.00	
Potential Uncontrolled Emissions lbs/hr	1.80	0.27	0.0	0.0	0.00	0.0	
Potential Uncontrolled Emissions tons/year	7.88	1.18	0.00	0.00	0.00	0.00	
Potential Controlled Emissions lbs/hr	1.80	0.27	0.0	0.0	0.00	0.0	
Potential Controlled Emissions tons/year	7.88	1.18	0.0	0.0	0.00	0.0	

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24 for similar operation at gray iron foundry (SCC# 3-04-003-50).

Shakeout		Throughput					
		LBS/HR	TON/HR				
TYPE OF MATERIAL		216	0.108				
Metal							
	PM lbs/ton metal	PM10 lbs/ton metal	SOx lbs/ton metal	NOx lbs/ton metal	VOC lbs/ton metal	CO lbs/ton metal	
	3.2	2.24	0.0	0.0	1.20	0.0	
Potential Uncontrolled Emissions lbs/hr	0.35	0.24	0.0	0.0	0.1	0.0	
Potential Uncontrolled Emissions tons/year	1.51	1.06	0.00	0.00	0.57	0.00	
Potential Controlled Emissions lbs/hr	0.35	0.24	0.0	0.0	0.1	0.0	
Potential Controlled Emissions tons/year	1.51	1.06	0.00	0.00	0.57	0.00	

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24 for similar operation at gray iron foundry (SCC# 3-04-003-31).

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
Operating Permit No.: M039-20230
Pit ID: 039-00612
Reviewer: Trish Earls

Machining Operations (grinding)		Maximum Throughput					
TYPE OF MATERIAL		LBS/HR	TON/HR	Control Device:			
Metal		216	0.108	Cyclone			
				Control Efficiency:		90.00%	
	PM lbs/ton metal	PM10 lbs/ton metal	SOx lbs/ton metal	NOx lbs/ton metal	VOC lbs/ton metal	CO lbs/ton metal	Lead lbs/ton metal charged
	17	1.7	0.0	0.0	0.00	0.0	0.85
Potential Uncontrolled Emissions lbs/hr	1.84	0.18	0.0	0.0	0.0	0.0	0.09
Potential Uncontrolled Emissions tons/year	8.04	0.80	0.00	0.00	0.00	0.00	0.40
Potential Controlled Emissions lbs/hr	0.18	0.02	0.0	0.0	0.0	0.0	0.01
Potential Controlled Emissions tons/year	0.80	0.08	0.00	0.00	0.00	0.00	0.04

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24 for similar operation at gray iron foundry (SCC# 3-04-003-40).

Machining Operations (abrasive blasting)		Maximum Throughput					
TYPE OF MATERIAL		LBS/HR	TON/HR	Control Device:			
Metal		216	0.108	Cyclone			
				Control Efficiency:		90.00%	
	PM lbs/ton metal	PM10 lbs/ton metal	SOx lbs/ton metal	NOx lbs/ton metal	VOC lbs/ton metal	CO lbs/ton metal	Lead lbs/ton metal charged
	17	1.7	0.0	0.0	0.00	0.0	0.85
Potential Uncontrolled Emissions lbs/hr	1.84	0.18	0.0	0.0	0.0	0.0	0.09
Potential Uncontrolled Emissions tons/year	8.04	0.80	0.00	0.00	0.00	0.00	0.40
Potential Controlled Emissions lbs/hr	0.18	0.02	0.0	0.0	0.0	0.0	0.01
Potential Controlled Emissions tons/year	0.80	0.08	0.00	0.00	0.00	0.00	0.04

Note: Emission factors from USEPA's Factor Information Retrieval (FIRE) Data System, version 6.24 for similar operation at gray iron foundry (SCC# 3-04-003-40).

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

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
 118 Lafayette Street, Goshen, Indiana 46526
Operating Permit No.: M039-20230
Plt ID: 039-00612
Reviewer: Trish Earls

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

2.73

23.9

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.02	0.09	0.01	1.19	0.07	1.00

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See next page for HAPs emissions calculations.

updated 4/99

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

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
 118 Lafayette Street, Goshen, Indiana 46526
Operating Permit No.: M039-20230
Plt ID: 039-00612
Reviewer: Trish Earls

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.507E-05	1.433E-05	8.954E-04	2.149E-02	4.059E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.969E-06	1.313E-05	1.671E-05	4.536E-06	2.507E-05

Methodology is the same as previous page.

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

Appendix A: 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
Operating Permit No.: M039-20230
Pit ID: 039-00612
Reviewer: Trish Earls

Lead Coating Line		Maximum Throughput					
		LBS/HR	TON/HR				
TYPE OF MATERIAL		Metal					
Lead		0.721	3.6E-04				
	Lead	lbs/ton metal processed	PM/PM10	SOx	NOx	VOC	CO
	1.5	0	0.00	0.00	0.00	0.00	0.00
Potential Uncontrolled Emissions lbs/hr		5.4E-04	0.00	0.00	0.00	0.00	0.0
Potential Uncontrolled Emissions tons/year		2.4E-03	0.00	0.00	0.00	0.00	0.00
Potential Controlled Emissions lbs/hr		5.4E-04	0.00	0.00	0.00	0.00	0.00
Potential Controlled Emissions tons/year		2.4E-03	0.00	0.00	0.00	0.00	0.00

Note: Emission factors are from USEPA's FIRE version 6.24 for Metallic lead products, SCC#3-04-051-03.

Potential HCl emissions estimated using Esco Engineering program for estimating emissions from open HCl pickling tanks. Estimated emissions assuming 12.5% HCl, 0.5% Fe, 70 degrees F temp., 158 cfm/sq. ft and 1 in. of free board.
Potential HCl emissions = 4.1E-04 lb/hr = 1.8E-03 ton/yr.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
 118 Lafayette Street, Goshen, Indiana 46526
Operating Permit No.: M039-20230
Pit ID: 039-00612
Reviewer: Trish Earls

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency	Material Coated
Benders #2 Solvent	7.26	100.00%	0.0%	100.0%	0.0%	0.00%	0.33300	0.046	7.26	7.26	0.11	2.67	0.49	0.00	N/A	100%	Metal
Citrus Cleaner	8.34	90.00%	0.0%	90.0%	0.0%	10.00%	0.02800	0.046	7.51	7.51	0.01	0.23	0.04	0.00	75.06	100%	Glass
PVC Cement	7.42	90.00%	0.0%	90.0%	0.0%	10.00%	0.00300	0.046	6.68	6.68	0.00	0.02	0.00	0.00	66.78	100%	Plastic
BAS 55 Bulk Adhesive	6.34	34.80%	0.0%	34.8%	0.0%	30.00%	1.22000	0.046	2.21	2.21	0.12	2.97	0.54	0.51	7.35	50%	Wood
Red Bulk Adhesive	6.67	46.90%	0.0%	46.9%	0.0%	14.10%	1.22000	0.046	3.13	3.13	0.18	4.21	0.77	0.44	22.19	50%	Wood
Benders Undercoating	6.76	70.00%	0.0%	70.0%	0.0%	30.00%	0.08000	0.046	4.73	4.73	0.02	0.42	0.08	0.01	15.77	75%	Metal
ADPRO	7.11	54.90%	0.0%	54.9%	0.0%	20.00%	0.05500	0.046	3.90	3.90	0.01	0.24	0.04	0.01	19.52	75%	Wood
98-3	7.51	60.00%	0.0%	60.0%	0.0%	16.90%	0.18000	0.046	4.51	4.51	0.04	0.90	0.16	0.03	26.66	75%	Metal
Silicone Spray	5.42	88.40%	0.0%	88.4%	0.0%	5.00%	0.01400	0.046	4.79	4.79	0.00	0.07	0.01	0.00	95.83	75%	Metal
WD40	6.67	71.00%	0.0%	71.0%	0.0%	26.00%	0.03000	0.046	4.74	4.74	0.01	0.16	0.03	0.00	18.21	100%	Metal
Sikaflex 255	10.10	5.30%	0.0%	5.3%	0.0%	94.70%	0.30600	0.046	0.54	0.54	0.01	0.18	0.03	0.00	0.57	100%	Wood/Metal
Sika Primer 206	8.87	57.50%	0.0%	57.5%	0.0%	42.50%	0.30600	0.046	5.10	5.10	0.07	1.72	0.31	0.00	12.00	100%	Wood/Metal
Glass Cleaner	8.20	100.00%	92.0%	8.0%	92.0%	0.00%	0.22000	0.046	8.20	0.66	0.01	0.16	0.03	0.00	N/A	75%	Glass
Wood Glue	9.17	54.10%	53.1%	1.0%	58.4%	40.20%	0.12000	0.046	0.22	0.09	0.00	0.01	0.00	0.00	0.23	100%	Wood
Silicone Caulk	8.67	5.00%	0.0%	5.0%	0.0%	95.00%	0.19000	0.046	0.43	0.43	0.00	0.09	0.02	0.00	0.46	100%	Wood/Metal
Acetone	6.59	0.00%	0.0%	0.0%	0.0%	0.00%	0.33300	0.046	0.00	0.00	0.00	0.00	0.00	0.00	N/A	100%	Wood/Metal
Sika Cleaner	6.70	100.00%	5.0%	95.0%	5.0%	0.00%	0.00300	0.046	6.70	6.37	0.00	0.02	0.00	0.00	N/A	100%	Metal/Plastic
Fabric Cleaner	10.01	41.50%	0.0%	41.5%	0.0%	0.00%	0.00200	0.046	4.15	4.15	0.00	0.01	0.00	0.00	N/A	75%	Cloth

State Potential Emissions

Add worst case coating to all solvents

0.59

14.09

2.57

0.99

Baffles PM Control Eff. %	Controlled Emissions	Controlled Emissions	Controlled Emissions	Controlled Emissions
75.00%	0.59	14.09	2.57	0.25

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations**HAP Emissions****From Surface Coating Operations****Company Name:** Independent Protection Company, Inc.**Address City IN Zip:** 1607 South Main Street, Goshen, Indiana 46526

118 Lafayette Street, Goshen, Indiana 46526

Operating Permit No.: M039-20230**Pit ID:** 039-00612**Reviewer:** Trish Earls

Material	Density (Lb/Gal)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Weight % Hexane	Weight % MEK	Weight % Toluene	Weight % Perchloro-ethylene	Weight % TCE	Weight % Xylenes	Weight % MDI	Weight % 1,4-Dioxane	Weight % 1,2-Epoxybutane
Benders #2 Solvent	7.26	0.33300	0.046	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Citrus Cleaner	8.34	0.02800	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PVC Cement	7.42	0.00300	0.046	0.00%	60.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BAS 55 Bulk Adhesive	6.34	1.22000	0.046	34.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Red Bulk Adhesive	6.67	1.22000	0.046	8.80%	6.90%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Benders Undercoating	6.76	0.08000	0.046	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ADPRO	7.11	0.05500	0.046	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
98-3	7.51	0.18000	0.046	0.00%	0.00%	15.92%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Silicone Spray	5.42	0.01400	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
WD40	6.67	0.03000	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sikaflex 255	10.10	0.30600	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	4.70%	0.60%	0.00%	0.00%
Sika Primer 206	8.87	0.30600	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%	0.00%	0.00%	0.00%
Glass Cleaner	8.20	0.22000	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Wood Glue	9.17	0.12000	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Silicone Caulk	8.67	0.19000	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Acetone	6.59	0.33300	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sika Cleaner	6.70	0.00300	0.046	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fabric Cleaner	10.01	0.00200	0.046	0.00%	0.00%	0.00%	49.60%	25.52%	0.00%	0.00%	0.60%	0.10%

See next page for HAP emission calculations

Appendix A: Emissions Calculations

HAP Emissions

From Surface Coating Operations

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
 118 Lafayette Street, Goshen, Indiana 46526
Operating Permit No.: M039-20230
Pit ID: 039-00612
Reviewer: Trish Earls

Material	Density (Lb/Gal)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Hexane Emissions (tons/yr)	MEK Emissions (tons/yr)	Toluene Emissions (tons/yr)	Perchloro-ethylene Emissions (tons/yr)	TCE Emissions (tons/yr)	Xylenes Emissions (tons/yr)	MDI Emissions (tons/yr)	1,4-Dioxane Emissions (tons/yr)	1,2-Epoxybutane Emissions (tons/yr)
Benders #2 Solvent	7.26	0.33300	0.046	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00
Citrus Cleaner	8.34	0.02800	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PVC Cement	7.42	0.00300	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BAS 55 Bulk Adhesive	6.34	1.22000	0.046	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Red Bulk Adhesive	6.67	1.22000	0.046	0.14	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benders Undercoating	6.76	0.08000	0.046	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
ADPRO	7.11	0.05500	0.046	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98-3	7.51	0.18000	0.046	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Silicone Spray	5.42	0.01400	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WD40	6.67	0.03000	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikaflex 255	10.10	0.30600	0.046	0.00	0.00	0.00	0.00	0.00	0.03	3.7E-03	0.00	0.00
Sika Primer 206	8.87	0.30600	0.046	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Glass Cleaner	8.20	0.22000	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Glue	9.17	0.12000	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silicone Caulk	8.67	0.19000	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acetone	6.59	0.33300	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sika Cleaner	6.70	0.00300	0.046	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fabric Cleaner	10.01	0.00200	0.046	0.00	0.00	0.00	2.0E-03	1.0E-03	0.00	0.00	2.4E-05	4.0E-06
State Potential Emissions				0.70	0.12	0.56	0.00	0.00	0.04	0.00	0.00	0.00

Total HAP Emissions (tons/yr): 1.42

METHODOLOGY

Potential HAP T1ons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * Weight % HAP * (8760 hr/yr) * (1 ton/2000 lbs)

**Appendix A: Emissions Calculations
Particulate Emissions
From Unpaved Roadways**

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
 118 Lafayette Street, Goshen, Indiana 46526
Operating Permit No.: M039-20230
Plt ID: 039-00612
Reviewer: Trish Earls

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8,760 hours of use and USEPA's AP-42, 5th Edition, Section 13.2.2.2.

I. Employee Vehicles and vans/limos/buses

4 trip/hr x
 0.02 mile/trip x
 2 (round trip) x
 8,760 hr/yr = 1401.6 miles per year

$$E_f = k \cdot \left[\frac{(s/12)^a \cdot [(S/30)^d]}{(M/0.5)^c} \right] \cdot [(365-P)/365] - 0.00047$$

= 0.28 lb PM-10/mile
 = 1.34 lb PM/mile

where k = 1.8 (particle size multiplier for PM-10) (k = 6 for PM-30 or TSP)
 s = 7 mean % silt content of unpaved roads
 a = 1 Constant for PM and PM-10
 d = 0.5 Constant for PM-10 (d = 0.3 for PM-30 or TSP)
 c = 0.2 Constant for PM-10 (c = 0.3 for PM-30 or TSP)
 W = 4 tons average vehicle weight
 M = 0.5 surface material moisture content, % (default is 0.5 for dry conditions)
 S = 5.0 mph speed limit
 P = 125.0 number of days with at least 0.01 in. of precipitation per year

PM-10: $\frac{0.28 \text{ lb/mi} \times 1401.6 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.20 \text{ tons/yr}$

PM: $\frac{1.34 \text{ lb/mi} \times 1401.6 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.94 \text{ tons/yr}$

**Appendix A: Emissions Calculations
Particulate Emissions
From Woodworking Operations**

Company Name: Independent Protection Company, Inc.
Address City IN Zip: 1607 South Main Street, Goshen, Indiana 46526
118 Lafayette Street, Goshen, Indiana 46526
Operating Permit No.: M039-20230
Plt ID: 039-00612
Reviewer: Trish Earls

Mill Room (WW1) Includes one band saw, one table saw, one chop saw, and one belt sander. Emissions are collected by a Jet Tool and Equip. 1,900 CFM dust collector.

Cabinet Shop (WW2) Includes one table saw, one chop saw, one belt sander, one routing table, one pocket machine and one hinge table. Emissions are collected by a Northtech 1,900 CFM dust collector.

EMISSION BASIS FOR MILL ROOM

Filter air volume: 1900 scfm
Filter exhaust loading: 0.00787 gr/scf
Wood used in 2003: 23293 pounds
Dust collected in 2003: 2400 pounds
Filter efficiency: 90 %

Actual hours in 2003: 2080 hours
Dust collected per hour: 1.15 lbs/hr

Potential emissions = (8,760 hrs/yr) x (lbs dust collected per hour) / [(% filter efficiency)/100]/(2000 lbs/ton)

Potential uncontrolled PM/PM10 emissions = **5.62 tons/yr**

Potential controlled emissions = (Potential uncontrolled emissions) x (100 - % control efficiency)/100

Potential controlled PM/PM10 emissions = **0.56 tons/yr**

EMISSION BASIS FOR CABINET SHOP

Filter air volume: 1900 scfm
Filter exhaust loading: 0.0059 gr/scf
Wood used in 2003: 6707 pounds
Dust collected in 2003: 1800 pounds
Filter efficiency: 90 %

Actual hours in 2003: 2080 hours
Dust collected per hour: 0.87 lbs/hr

Potential emissions = (8,760 hrs/yr) x (lbs dust collected per hour) / [(% filter efficiency)/100]/(2000 lbs/ton)

Potential uncontrolled PM/PM10 emissions = **4.21 tons/yr**

Potential controlled emissions = (Potential uncontrolled emissions) x (100 - % control efficiency)/100

Potential controlled PM/PM10 emissions = **0.42 tons/yr**

Total potential uncontrolled PM/PM10 emissions from woodworking = **9.83 tons/yr**

Total potential controlled PM/PM10 emissions from woodworking = **0.98 tons/yr**