

**PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT**

**Haynes International Inc.
2000 West Deffenbaugh Street
Kokomo, Indiana 46904**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T067-7729-00009	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

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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 Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a stationary rolling, drawing, and extruding of nonferrous metal foundry operation that produces nonferrous metal alloys.

Responsible Official: A. A. Cijan
Source Address: 2000 West Deffenbaugh Street, Kokomo, Indiana, 46904
Mailing Address: 1020 West Park Avenue, P.O. Box 9013, Kokomo, Indiana, 46904-9013
SIC Code: 3356
County Location: Howard
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source, under PSD Rules;
Major Source, Section 112 of the Clean Air Act

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

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

Metal Melting and Machining Operations

- (1) One (1) argon oxygen decarbonization (AOD) vessel processing a metal throughput of 5.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-14);
- (2) Six (6) electroslag remelting furnaces (ESR) processing a total metal throughput of 5.51 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-18);
- (3) One (1) electric arc furnace (EAF) processing a metal throughput of 5.0 tons per hour with a five (5) module dust collector for particulate matter control and exhausting to five (5) ducts (S/V ID: DC-22(1), DC-22(2), DC-22(3), DC-22(4), and DC-22(5), respectively);
- (4) One (1) sawing operation consisting of one (1) swing frame abrasive cut-off saw and one (1) automatic abrasive cut-off saw processing a total metal throughput of 4.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-31);
- (5) One (1) CMI automatic abrasive billet grinder processing a metal throughput of 3.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-32);
- (6) One (1) rotoblast shot blaster processing a metal throughput of 8.0 tons per hour with a dust collector (DC-36) for particulate matter control and exhausting inside the building R35;

- (7) One (1) new CMI grinder processing a metal throughput of 3.0 tons per hour with one (1) dust collector for particulate control and exhausting to one (1) stack (S/V ID: DC-37);
- (8) One (1) grinding operation consisting of three (3) trackbound traveling abrasive grind machines (Grind 1), each grinder processing a metal throughput of 1.875 tons per hour with three (3) dust collectors for particulate matter control and exhausting to three (3) stacks (S/V ID: DC-1, DC-3, and DC-4), respectively;
- (9) One (1) grinder operation consisting of one (1) track bound traveling abrasive grind machine and one (1) stationary abrasive end grinder (Grind 2), each grinder processing a metal throughput of 4.35 tons per hour with two (2) dust collectors for particulate matter control and exhausting to two (2) stacks (S/V ID: DC-23C and DC-23B), respectively;
- (10) One (1) sawing operation consisting of one (1) fox automatic abrasive cut-off saw and two (2) swing frame cut-off saws (Saw 1), each processing a metal throughput of 2.8 tons per hour with three (3) dust collectors for particulate matter control and exhausting to three (3) stacks (S/V ID: DC-2, DC-5, and DC-23A) respectively;

Metal Machining Operations

- (11) One (1) grinding and sawing operation consisting of two (2) swing frame abrasive grinders and one (1) swing frame abrasive cut-off saw processing a total metal throughput of 1.15 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-8);
- (12) One (1) grinding and sawing operation consisting of four (4) swing frame abrasive spot grinders, one (1) swing frame abrasive cut-off saw, and one (1) swing frame belt grinder processing a total metal throughput of 1.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-9);
- (13) One (1) rotoblast shot blaster processing a metal throughput of 1.5 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-10);
- (14) One (1) walk in blast room processing a metal throughput of 1.25 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-12);
- (15) One (1) swing frame abrasive cut-off saw processing a metal throughput of 0.015 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-13);

Pickling Operations

- (16) One (1) R1 acid batch pickling line, pickling a maximum throughput of 2.0 tons of metal per hour, utilizing a fume scrubber (FS-1) to control hydrofluoric acid (HF), nitric acid (HNO₃), NOx, and particulate emissions, and exhausting to one (1) stack (S/V ID: FS-1); and
- (17) One (1) R35 acid strip pickling line, pickling a maximum of 7.5 tons of metal per hour, utilizing a fume scrubber (FS-2) to control hydrofluoric acid (HF), nitric acid (HNO₃), NOx, and particulate emissions, and exhausting to one (1) stack (S/V ID: FS-2).

Natural Gas Combustion Units

- (18) Two (2) natural gas-fired boilers, identified as Boiler 1 and Boiler 2, each rated at 16.0 million (mm) British thermal units (Btu) per hour, and each exhausting to one (1) stack (S/V ID: GB1 and GB2), respectively;
- (19) Four (4) 3-Hi Mill preheat furnaces (Numbers 1, 2, 3, and 4) rated at 10.35 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (20) One (1) 2-Hi Mill preheat furnace (Number 5) rated at 22 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (21) One (1) annealing furnace (Number 6) rated at 14.8 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (22) One (1) annealing furnace (Number 16) rated at 16 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (23) One (1) annealing furnace (Number 20) rated at 12 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (24) Five (5) 4-Hi mill preheat furnaces (Numbers 51, 52, 53, 56, and 57), each rated at 15 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to five (5) stacks (SV ID: GF51, GF52, GF53, GF56, and GF57);
- (25) Two (2) 4-Hi mill steckle furnaces, each rated at 20 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (26) One (1) strip annealing furnace A&K line rated at 10 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to one (1) stack (S/V ID: GFA & K).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million (mm) British thermal units (Btu) per hour;
 - (a) One (1) R1 pickle tank boiler rated at 2.10 mmBtu per hour;
 - (b) One (1) R1 high pressure wash boiler rated at 2.52 mmBtu per hr;
 - (c) One (1) R35 pickle line boiler rated at 1.5 mmBtu per hour;
 - (d) One (1) R42 steam heating boiler rated at 1.05 mmBtu per hour.
- (2) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6:
 - (a) eighteen (18) separate cold cleaner degreasers used for parts washing, each of which has less than or equal to 80 gallon capacities; and
 - (b) one (1) large mill bearing cleaner/degreaser, located in building R55, utilizing an enclosed power wash cleaner, and a catch basin where wastewater is pumped into an enclosed tank.

- (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
- (4) Grinding and machining operations with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations;
- (5) Other activities or categories not previously identified which qualify as insignificant:
 - (a) Two (2) dust silos (one (1) 50 ton storage capacity and one (1) 25 ton storage capacity) located in Building R-24, with two (2) dust collectors;
 - (b) one (1) R36 strip anneal and Kolene operation with one (1) spray quench tank, one (1) mechanical brush scrubber, and one (1) fume scrubber, exhausting through one (1) stack (S/V ID: FS-3); and
 - (c) one (1) R24 weigh room utilizing a hood over the raw material scale and vented to a dust collector (DC-33) and out one (1) stack (S/V ID: DC-33).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) 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 Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

B.2 Definitions [326 IAC 2-7-1]

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, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM .

- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(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 nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

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.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, 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.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

- (1) Enforcement action;
- (2) Permit termination, revocation and reissuance, or modification; or
- (3) Denial of a permit renewal application.

- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, 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, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report 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, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Any insignificant activity that has been added without a permit revision;

- (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [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 (PMP) 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;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP 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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, .

B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

- (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) 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, OAM, on or before the date it is due. [326 IAC 2-5-3]
 - (2) If IDEM, OAM, , upon receiving a timely and complete 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

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 2-7 until IDEM, OAM, , 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, OAM, , any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-7-6(6)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), 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%) opacity 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

(a) The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(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 Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) 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 that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 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 methods approved by IDEM, OAM.

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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and

- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

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

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, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

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

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
[326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM, . The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

- (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within “normal” parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (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 corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

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

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement 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, OAM, on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. 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 written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;

- (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and 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 Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) 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, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

- (g) 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.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Metal Melting and Machining Operations including:

- (1) One (1) argon oxygen decarbonization (AOD) vessel processing a metal throughput of 5.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-14);
- (2) Six (6) electroslag remelting furnaces (ESR) processing a total metal throughput of 5.51 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-18);
- (3) One (1) electric arc furnace (EAF) processing a metal throughput of 5.0 tons per hour with a five (5) module dust collector for particulate matter control and exhausting to five (5) ducts (S/V ID: DC-22(1), DC-22(2), DC-22(3), DC-22(4), and DC-22(5), respectively);
- (4) One (1) sawing operation consisting of one (1) swing frame abrasive cut-off saw and one (1) automatic abrasive cut-off saw processing a total metal throughput of 4.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-31);
- (5) One (1) CMI automatic abrasive billet grinder processing a metal throughput of 3.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-32);
- (6) One (1) rotoblast shot blaster processing a metal throughput of 8.0 tons per hour with a dust collector (DC-36) for particulate matter control and exhausting inside the building R35;
- (7) One (1) new CMI grinder processing a metal throughput of 3.0 tons per hour with one (1) dust collector for particulate control and exhausting to one (1) stack (S/V ID: DC-37);
- (8) One (1) grinding operation consisting of three (3) trackbound traveling abrasive grind machines (Grind 1), each grinder processing a metal throughput of 1.875 tons per hour with three (3) dust collectors for particulate matter control and exhausting to three (3) stacks (S/V ID: DC-1, DC-3, and DC-4), respectively;
- (9) One (1) grinder operation consisting of one (1) track bound traveling abrasive grind machine and one (1) stationary abrasive end grinder (Grind 2), each grinder processing a metal throughput of 4.35 tons per hour with two (2) dust collectors for particulate matter control and exhausting to two (2) stacks (S/V ID: DC-23C and DC-23B), respectively;
- (10) One (1) sawing operation consisting of one (1) fox automatic abrasive cut-off saw and two (2) swing frame cut-off saws (Saw 1), each processing a metal throughput of 2.8 tons per hour with three (3) dust collectors for particulate matter control and exhausting to three (3) stacks (S/V ID: DC-2, DC-5, and DC-23A) respectively;

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

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the above listed facilities shall be limited to 0.03 grain per dry standard cubic foot (dscf).

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each facility and its control device.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) During the period within 36 months after issuance of this permit, the Permittee shall perform PM testing on the argon oxygen decarbonization (AOD) vessel, the electric arc furnace (EAF), and the six (6) electroslag remelting furnaces (ESR) utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner, to determine compliance with Condition D.1.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

- (b) During the period within 36 months after issuance of this permit, the Permittee shall perform a one (1) time Carbon Monoxide (CO) test on the electric arc furnace (EAF) utilizing Method 10 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner to determine an emission factor for the facility to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration). In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.1.4 Particulate Matter (PM)

The dust collectors for PM control shall be in operation at all times when the facilities are in operation.

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

D.1.5 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust from each facility shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the facilities mentioned below, at least once daily when the facilities are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range specified below or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

<u>Facility</u>	<u>Pressure Drop (inches of water)</u>
AOD (DC-14):	2.0 - 4.0
ESR (DC- 18):	6.0 - 8.0
EAF(DC- 22):	3.0 - 5.0
Saw/Grind (DC-31):	2.0 - 4.0
Rotoblast (DC-36):	1.0 - 3.0
Grinders (DC-1, DC-3, and DC-4):	2.0 - 4.0 each
Grinders (DC-23C and DC-23B):	2.0 - 4.0 each
Sawing (DC-2, DC-5, and DC-23A):	2.0 - 4.0 each
CMI grinder (DC-32):	2.0 - 4.0
CMI grinder (DC-37):	2.0 - 4.0

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

D.1.7 Baghouse/Dust Collector Inspections

An inspection shall be performed each calendar quarter of all bags controlling the melting, grinding, and sawing operations listed in this section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the facilities stack exhausts.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Metal Machining Operations including the following:

- (1) One (1) grinding and sawing operation consisting of two (2) swing frame abrasive grinders and one (1) swing frame abrasive cut-off saw processing a total metal throughput of 1.15 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-8);
- (2) One (1) grinding and sawing operation consisting of four (4) swing frame abrasive spot grinders, one (1) swing frame abrasive cut-off saw, and one (1) swing frame belt grinder processing a total metal throughput of 1.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-9);
- (3) One (1) rotoblast shot blaster processing a metal throughput of 1.5 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-10);
- (4) One (1) walk in blast room processing a metal throughput of 1.25 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-12); and
- (5) One (1) swing frame abrasive cut-off saw processing a metal throughput of 0.015 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-13).

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

D.2.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the above listed facilities shall be limited to 0.03 grain per dry standard cubic foot (dscf).

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each facility and its control device.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.4 Particulate Matter (PM)

The dust collectors for PM control shall be in operation at all times when the facilities are in operation.

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

D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust from each facility shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.2.6 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the facilities stack exhausts.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Acid Pickling Operations

- (1) One (1) R1 acid batch pickling line, pickling a maximum throughput of 2.0 tons of metal per hour, utilizing a fume scrubber (FS-1) to control hydrofluoric acid (HF), nitric acid (HNO₃), NOx, and particulate emissions, and exhausting to one (1) stack (S/V ID: FS-1); and
- (2) One (1) R35 acid strip pickling line, pickling a maximum of 7.5 tons of metal per hour, utilizing a fume scrubber (FS-2) to control hydrofluoric acid (HF), nitric acid (HNO₃), NOx, and particulate emissions, and exhausting to one (1) stack (S/V ID: FS-2).

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

D.3.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the above listed facilities shall be limited to 0.03 grain per dry standard cubic foot (dscf).

D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [40 CFR 52.21]

- (a) The input of raw materials into each the R1 batch pickling operation controlled by fume scrubber FS-1, and the R35 strip pickling operation controlled by fume scrubber FS-2, shall be at a level such that the emissions of NOx from each of these facilities shall not exceed 40 tons per twelve (12) consecutive month period. The applicant shall conduct a performance test on each of these units to establish an emission factor for NOx, and to determine the NOx control efficiency of the fume scrubbers (FS-1 and FS-2).
- (b) If the required performance tests indicate that the potential to emit NOx, after controls, is equal to or greater than 40 tons per year, the Permittee shall limit production, or take any other steps necessary as approved by the Commissioner, to limit the potential to emit NOx from each of these facilities to less than 40 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each pickling operation and each fume scrubber.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) During the period between 12 and 36 months from the date of issue of this permit, the Permittee shall conduct a one (1) time compliance performance test to establish emission factors for NOx from the R1 acid batch and R35 strip pickling lines utilizing Method 7 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner, to determine compliance with Condition D.3.2. These tests shall determine the proper operating parameters, including the pressure drop, flow rate, and acid content necessary for optimal overall NOx control efficiency by the fume scrubbers (FS-1 and FS-2). In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

- (b) During the period between 12 and 36 months from the date of issue of this permit, the Permittee shall conduct a one (1) time compliance performance test on the R1 acid batch and R35 strip pickling lines to determine compliance with Condition D.3.1, and to establish proper operating parameters for optimal control efficiency of particulate matter (PM) by the fume scrubbers (FS-1 and FS-2), utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.3.5 Scrubber Operating Condition

That the fume scrubbers identified as FS-1 and FS-2 shall be operated at all times when the R1 batch pickling and R35 strip pickling units are in operation, respectively.

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

D.3.6 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust from each facility shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.7 Scrubber Monitoring

- (a) The Permittee shall monitor and record the pH and flow rate of the scrubber, at least once daily when the units are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH and flow rate across each of the scrubbers shall be maintained within the range specified below or a range established during the latest stack test. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the acid content and flow rate readings are outside of the following ranges for any one reading:

<u>Scrubber</u>	<u>Flow rate</u>	<u>pH</u>
FS-1	150 gallons per minute	above 10
FS-2	75 gallons per minute	above 10

- (b) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced

- (c) In the event that a scrubber's failure has been observed:
 - (i) The affected process will be shut down immediately until the failed unit has been replaced.
 - (ii) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

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

D.3.8 Record Keeping Requirements

- (a) To document compliance with Condition D.3.6, the Permittee shall maintain records of daily visible emission notations of the facilities stack exhausts.
- (b) To document compliance with Condition D.3.7 the Permittee shall maintain a log of the daily acid content, and flow rate of the scrubber, quarterly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Natural Gas Combustion Units including;

- (1) Two (2) natural gas-fired boilers, identified as Boiler 1 and Boiler 2, each rated at 16.0 million (mm) British thermal units (Btu) per hour, and each exhausting to one (1) stack (S/V ID: GB1 and GB2), respectively;
- (2) Four (4) 3-Hi Mill preheat furnaces (Numbers 1, 2, 3, and 4) rated at 10.35 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (3) One (1) 2-Hi Mill preheat furnace (Number 5) rated at 22 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (4) One (1) annealing furnace (Number 6) rated at 14.8 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (5) One (1) annealing furnace (Number 16) rated at 16 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (6) One (1) annealing furnace (Number 20) rated at 12 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (7) Five (5) 4-Hi mill preheat furnaces (Numbers 51, 52, 53, 56, and 57), each rated at 15 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to five (5) stacks (SV ID: GF51, GF52, GF53, GF56, and GF57);
- (8) Two (2) 4-Hi mill steckle furnaces, each rated at 20 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (9) One (1) strip annealing furnace A&K line rated at 10 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to one (1) stack (S/V ID: GFA & K).

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

D.4.1 Particulate Matter (PM) [326 IAC 6-1-2(b)]

Pursuant to 326 IAC 6-1-2(b)(5) (Emissions Limitations for Sources of Indirect Heating), the allowable particulate matter (PM) emission rate from each of the natural gas-fired boilers (Boilers 1 and 2) shall in no case exceed 0.01 grains per dry standard cubic foot (dscf) for all gaseous fuel-fired steam generators.

D.4.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The usage of natural gas in the five (5) 4-Hi mill preheat furnaces, the two (2) 4-Hi mill steckle furnaces, and the one (1) strip annealing furnace A&K, shall be limited to a total of 780.0 million cubic feet (MMCF) per twelve (12) consecutive month period. Compliance shall be demonstrated at the end of each month based on the total natural gas usage for the most recent twelve (12) month period. This natural gas usage limitation is required to limit NOx emissions to less than 40 tons per year to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 and the NOx limit specified in Condition D.4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.4.4 Record Keeping Requirements

- (a) To document compliance with Condition D.4.2, the Permittee shall maintain the following records:
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual natural gas usage in million cubic feet (mmcf) per month for the four (4) 4-Hi mill preheat furnaces, the two (2) 4-Hi mill steckle furnaces, and the one (1) strip annealing furnace A&K.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.2, and the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Specifically regulated insignificant activities including:

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million (mm) British thermal units (Btu) per hour;
 - (a) One (1) R1 pickle tank boiler rated at 2.10 mmBtu per hour;
 - (b) One (1) R1 high pressure wash boiler rated at 2.52 mmBtu per hr;
 - (c) One (1) R35 pickle line boiler rated at 1.5 mmBtu per hour;
 - (d) One (1) R42 steam heating boiler rated at 1.05 mmBtu per hour.
- (2) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6:
 - (a) eighteen (18) separate cold cleaner degreasers used for parts washing, each of which as less than or equal to 80 gallon capacities; and
 - (b) one (1) large mill bearing cleaner/degreaser, located in building R55, utilizing an enclosed power wash cleaner, and a catch basin where wastewater is pumped into an enclosed tank.
- (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
- (4) Grinding and machining operations with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations;
- (5) Other activities or categories not previously identified which qualify as insignificant:
 - (a) Two (2) dust silos (one (1) 50 ton storage capacity and one (1) 25 ton storage capacity) located in Building R-24, with two (2) dust collectors;
 - (b) one (1) R36 strip anneal and Kolene operation with one (1) spray quench tank, one (1) mechanical brush scrubber, and one (1) fume scrubber, exhausting through one (1) stack (S/V ID: FS-3); and
 - (c) one (1) R24 weigh room utilizing a hood over the raw material scale and vented to a dust collector (DC-33) and out one (1) stack (S/V ID: DC-33).

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

D.5.1 Particulate Matter (PM) [326 IAC 6-1-2(b)]

Pursuant to 326 IAC 6-1-2(b)(5) (Emissions Limitations for Sources of Indirect Heating), the allowable particulate matter (PM) emission rate from each of the natural gas-fired boilers listed above shall in no case exceed 0.01 grains per dry standard cubic foot (dscf) for all gaseous fuel-fired steam generators.

D.5.2 Volatile Organic Compounds (VOC)

The eighteen (18) separate cold cleaner degreasers and the large mill bearing degreaser are subject to the requirements specified below:

- (a) Pursuant to 326 IAC 8-3-2 and 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment 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 (38°C) (one hundred degrees Fahrenheit (100°F));
 - (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 (38°C) (one hundred degrees Fahrenheit (100°F)), 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 (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (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.5.3 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the R36 strip anneal and Kolene tank controlled by the mechanical brush and fume scrubber FS-3, the R24 weighing operation controlled by DC-33, and all other insignificant activities listed in this section shall be limited to 0.03 grain per dry standard cubic foot (dscf).

Compliance Determination Requirement

D.5.4 Particulate Matter (PM)

The dust collectors controlling the dust silos for PM control and the dust collector (DC-33) controlling the weighing operation shall be in operation at all times when the facilities are in operation.

D.5.5 Scrubber Operating Condition

That the mechanical brush scrubber and the fume scrubber (FS-3) shall be operated at all times when the R36 spray quench tank is in operation.

D.5.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.5.1 and 5.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Haynes International, Inc.
Source Address: 2000 W. Deffenbaugh St, Kokomo, IN 46904
Mailing Address: 1020 West Park Ave, P.O. Box 9013, Kokomo, IN 46904-9013
Part 70 Permit No.: T067-7729-00009

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Haynes International, Inc.
Source Address: 2000 W. Deffenbaugh St, Kokomo, IN 46904
Mailing Address: 1020 West Park Ave, P.O. Box 9013, Kokomo, IN 46904-9013
Part 70 Permit No.: T067-7729-00009

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
<input checked="" type="radio"/>	1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
<input checked="" type="radio"/>	2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

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

**PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Haynes International, Inc.
Source Address: 2000 W. Deffenbaugh St, Kokomo, IN 46904
Mailing Address: 1020 West Park Ave, P.O. Box 9013, Kokomo, IN 46904-9013
Part 70 Permit No.: T067-7729-00009

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To

Boiler 1

Boiler 2

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

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

Part 70 Quarterly Report

Source Name: Haynes International, Inc.
 Source Address: 2000 W. Deffenbaugh St, Kokomo, IN 46904
 Mailing Address: 1020 West Park Ave, P.O. Box 9013, Kokomo, IN 46904-9013
 Part 70 Permit No.: T067-7729-00009
 Facility: four (4) 4-Hi mill preheat furnaces, the two (2) 4-Hi mill steckle furnaces, and the one (1) strip annealing furnace A&K
 Parameter: Natural gas usage
 Limit: 780.0 million cubic feet (MMCF) per twelve (12) consecutive month period

YEAR: _____

Month	Natural Gas Usage (mmcf)	Natural Gas Usage (mmcf)	Natural Gas Usage (mmcf/year)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

**PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Haynes International, Inc.
Source Address: 2000 W. Deffenbaugh St, Kokomo, IN 46904
Mailing Address: 1020 West Park Ave, P.O. Box 9013, Kokomo, IN 46904-9013
Part 70 Permit No.: T067-7729-00009

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review

Source Background and Description

Source Name: Haynes International, Inc.
Source Location: 2000 West Deffenbaugh Street, Kokomo, IN 46904
County: Howard
SIC Code: 3356
Operation Permit No.: T067-7729-00009
Permit Reviewer: Jeremy Magliaro/EVP

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Haynes International, Inc. relating to the operation of rolling, drawing, and extruding of nonferrous metal foundry operation that produces nonferrous metal alloys.

Permitted Emission Units and Pollution Control Equipment

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

Metal Melting and Machining Operations

- (1) One (1) argon oxygen decarbonization (AOD) vessel processing a metal throughput of 5.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-14);
- (2) Six (6) electroslag remelting furnaces (ESR) processing a total metal throughput of 5.51 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-18);
- (3) One (1) electric arc furnace (EAF) processing a metal throughput of 5.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-22);
- (4) One (1) sawing operation consisting of one (1) swing frame abrasive cut-off saw and one (1) automatic abrasive cut-off saw processing a total metal throughput of 4.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-31);
- (5) One (1) CMI automatic abrasive billet grinder processing a metal throughput of 3.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-32);
- (6) One (1) rotoblast shot blaster processing a metal throughput of 8.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-36);

- (7) One (1) new CMI grinder processing a metal throughput of 3.0 tons per hour with one (1) dust collector for particulate control and exhausting to one (1) stack (S/V ID: DC-37);
- (8) One (1) grinding operation consisting of three (3) trackbound traveling abrasive grind machines (Grind 1), each grinder processing a metal throughput of 1.875 tons per hour with three (3) dust collectors for particulate matter control and exhausting to three (3) stacks (S/V ID: DC-1, DC-3, and DC-4), respectively;
- (9) One (1) grinder operation consisting of one (1) track bound traveling abrasive grind machine and one (1) stationary abrasive end grinder (Grind 2), each grinder processing a metal throughput of 4.35 tons per hour with two (2) dust collectors for particulate matter control and exhausting to two (2) stacks (S/V ID: DC-23C and DC-23B), respectively;
- (10) One (1) sawing operation consisting of one (1) fox automatic abrasive cut-off saw and two (2) swing frame cut-off saws (Saw 1), each processing a metal throughput of 2.8 tons per hour with three (3) dust collectors for particulate matter control and exhausting to three (3) stacks (S/V ID: DC-2, DC-5, and DC-23A) respectively;

Metal Machining Operations

- (11) One (1) grinding and sawing operation consisting of two (2) swing frame abrasive grinders and one (1) swing frame abrasive cut-off saw processing a total metal throughput of 1.15 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-8);
- (12) One (1) grinding and sawing operation consisting of four (4) swing frame abrasive spot grinders, one (1) swing frame abrasive cut-off saw, and one (1) swing frame belt grinder processing a total metal throughput of 1.0 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-9);
- (13) One (1) rotoblast shot blaster processing a metal throughput of 1.5 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-10);
- (14) One (1) walk in blast room processing a metal throughput of 1.25 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-12);
- (15) One (1) swing frame abrasive cut-off saw processing a metal throughput of 0.015 tons per hour with a dust collector for particulate matter control and exhausting to one (1) stack (S/V ID: DC-13);

Pickling Operations

- (16) One (1) R1 acid batch pickling line, pickling a maximum throughput of 2.0 tons of metal per hour, utilizing a fume scrubber (FS-1) to control hydrofluoric acid (HF), nitric acid (HNO₃), NOx, and particulate emissions, and exhausting to one (1) stack (S/V ID: FS-1); and
- (17) One (1) R35 acid strip pickling line, pickling a maximum of 7.5 tons of metal per hour, utilizing a fume scrubber (FS-2) to control hydrofluoric acid (HF), nitric acid (HNO₃), NOx, and particulate emissions, and exhausting to one (1) stack (S/V ID: FS-2).

Natural Gas Combustion Units

- (18) Two (2) natural gas-fired boilers, identified as Boiler 1 and Boiler 2, each rated at 16.0 million (mm) British thermal units (Btu) per hour, and each exhausting to one (1) stack (S/V ID: GB1 and GB2), respectively;

Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

The source also consists of the following unpermitted facilities/units:

- (1) Four (4) 3-Hi Mill preheat furnaces (Numbers 1, 2, 3, and 4) rated at 10.35 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (2) One (1) 2-Hi Mill preheat furnace (Number 5) rated at 22 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (3) One (1) annealing furnace (Number 6) rated at 14.8 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (4) One (1) annealing furnace (Number 16) rated at 16 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (5) One (1) annealing furnace (Number 20) rated at 12 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (6) Five (5) 4-Hi mill preheat furnaces (Numbers 51, 52, 53, 56, and 57), each rated at 15 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to five (5) stacks (SV ID: GF51, GF52, GF53, GF56, and GF57);
- (7) Two (2) 4-Hi mill steckle furnaces, each rated at 20 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting inside the plant;
- (8) One (1) strip annealing furnace A&K line rated at 10 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to one (1) stack (S/V ID: GFA & K).

New Emission Units and Pollution Control Equipment Requiring ENSR

There are no new facilities to be reviewed under the ENSR process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million (mm) British thermal units (Btu) per hour;
 - (a) Four (4) 24 inch bar mill preheat furnaces each rated at 9.0 mmBtu per hour;
 - (b) One (1) car bottom annealing furnace rated at 5.4 mmBtu per hour
 - (c) Two (2) 10 inch bar mill preheat furnaces each rated at 9.0 mmBtu per hour;
 - (d) Five (5) forge shop preheat furnaces each rated at 7.8 mmBtu per hour;
 - (e) One (1) forge shop preheat furnace rated at nine 9.0 mmBtu per hour;

- (f) One (1) annealing furnace rated at 7.8 mmBtu per hour;
 - (g) One (1) car bottom annealing furnace rated at 4.0 mmBtu per hour;
 - (h) One (1) R1 pickle tank boiler rated at 2.10 mmBtu per hour;
 - (i) One (1) R1 high pressure wash boiler rated at 2.52 mmBtu per hr;
 - (j) One (1) R35 pickle line boiler rated at 1.5 mmBtu per hour;
 - (k) One (1) R36 Kolene tank heater rated at 5.5 mmBtu per hour;
 - (l) One (1) R42 steam heating boiler rated at 1.05 mmBtu per hour.
- (2) Combustion source flame safety purging on startup;
 - (3) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
 - (4) The following VOC and HAP storage containers:
 - (a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons;
 - (b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
 - (5) Refractory storage not requiring air pollution equipment;
 - (6) Machining where an aqueous cutting coolant continuously floods the machining interface;
 - (7) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6:
 - (a) eighteen (18) separate cold cleaner degreasers used for parts washing, each of which has less than or equal to 80 gallon capacities; and
 - (b) one (1) large mill bearing cleaner/degreaser, located in building R55, utilizing an enclosed power wash cleaner, and a catch basin where wastewater is pumped into an enclosed tank.
 - (8) Cleaners and solvents characterized as follows:
 - (a) having a vapor pressure equal to or less than 2 kPa; 15 mmHg; or 0.3 psi measured at 38 degrees C (100 F) or;
 - (b) having a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 degrees C (68 F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
 - (9) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
 - (10) Closed loop heating and cooling systems;
 - (11) Rolling of recovery systems;
 - (12) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume;
 - (13) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs;
 - (14) Noncontact cooling tower systems with either of the following:
 - (a) forced and induced draft cooling tower system not regulated under a NESHAP;
 - (15) Quenching operations used with heat treating processes;
 - (16) Replacement or repair of electrostatic precipitators, bags, bags in baghouses and filters in other air filtration equipment;
 - (17) Heat exchanger cleaning and repair;
 - (18) Paved and unpaved roads and parking lots with public access;
 - (19) Underground conveyors;
 - (20) Asbestos abatement projects regulated by 326 IAC 14-10;
 - (21) Purging of gas lines and vessels that is related to routine maintenance and repair of building, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process;

- (22) Equipment used to collect any material that might be released during a malfunction, process, upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
- (23) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (24) On-site fire and emergency response training approved by the department;
- (25) Emergency generators as follows:
 - (a) Gasoline generators not exceeding 110 horsepower;
 - (b) Diesel generators not exceeding 1600 horsepower;
 - (c) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower;
- (26) Grinding and machining operations with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations;
- (27) A laboratory as defined in 326 IAC 2-7-1(20)(c);
- (28) Farm operations; and
- (29) Other activities or categories not previously identified: with insignificant thresholds:
 - (a) two (2) dust silos (one (1) 50 ton storage capacity and one (1) 25 ton storage capacity) located in Building R-24, with two (2) dust collectors;
 - (b) one (1) R36 strip anneal and Kolene operation with one (1) spray quench tank, one (1) mechanical brush scrubber, and one (1) fume scrubber, exhausting through one (1) stack (S/V ID: FS-3); and
 - (c) one (1) R24 weigh room utilizing a hood over the raw material scale and vented to a dust collector (DC-33) and out one (1) stack (S/V ID: DC-33).

Existing Approvals

The source has been operating under the following approvals:

- (1) Permit No: 34-09-85-0255, dated November 9, 1981;
- (2) Registration dated March 15, 1982;
- (3) Registration dated January 15, 1983: DC-18;
- (4) Permit No: 34-01-87-0262, dated June 30, 1983;
- (5) Permit No. 34-01-87-0263, dated June 30, 1983;
- (6) Registration dated April 29, 1983 (two registrations) ;
- (7) Registration dated September 2, 1983 ;
- (8) Registration dated March 7, 1984. Facilities operating under registration were ceased and operation status of registration was no longer applicable as of October 4, 1985;
- (9) Registration dated February 2, 1989;
- (10) Registration dated February 10, 1989;
- (11) Registration dated February 14, 1989;
- (12) Permit No. 34-09-93-0285, dated October 24, 1989;
- (13) Permit No. 34-09-93-0286, dated October 24, 1989;
- (14) Permit No. 34-09-93-0287, dated October 24, 1989;
- (15) Registration dated October 9, 1991; and
- (16) Construction Permit CP-067-8264-00009 dated September 10, 1997.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (1) CP-067-8264-00009, issued on September 10, 1997.

Condition 10: *Particulate matter emissions shall not exceed 8.56 lbs/hr, 37.50 tons/year to satisfy the requirements of 326 IAC 6-3.*

Reason not incorporated:

Howard County is one of the counties listed in 326 IAC 6-1-7. Therefore, this facility (because it has potential PM emissions greater than 100 tons per year), is subject to 326 IAC 6-1-2 (Nonattainment Area PM Emissions Limitations). Although Howard County is no longer considered a nonattainment area for PM (TSP), all sources located in Howard County are still subject to the requirements of 326 IAC 6-1. Therefore, 326 IAC 6-1-2(a) is now applicable to this facility.

- (2) There were several instances in previously issued operation permits, registrations, and exemptions with the clause *Emissions shall be at a level acceptable to 326 IAC 6-3.*

However, because this source is located in Howard County, all facilities with potential PM emissions greater than 100 tons per year are subject to 326 IAC 6-1-2 (Nonattainment Area PM Emissions Limitations) instead of 326 IAC 6-3 (Process Operations). This Part 70 Technical Support Document will explain which facilities are subject to 326 IAC 6-1-2 under the heading "State Rule Applicability".

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and 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 Requiring ENSR.*
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete Part 70 permit application for the purposes of this review was received on December 13, 1996. Additional information was received on April 27, 1998, August 14, 1998, September 2, 1998, and September 28, 1998.

A notice of completeness letter was mailed to Haynes International, Inc. on January 7, 1997.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (three (3) pages).

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	less than 100
VOC	less than 100
CO	greater than 100 but less than 250
NO _x	greater than 250

Note: For the purpose of determining Title V applicability for particulate, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Nickel	greater than 10
Chromium	greater than 10
Manganese	greater than 10
Cobalt	greater than 10
Hydrofluoric acid (HF)	less than 10
Nitric Acid (HNO ₃)	less than 10
xylene	negligible
Methyl tert butyl Ether (MTBE)	negligible
Toluene	negligible
ethyl benzene	negligible
hexane	negligible
benzene	negligible
TOTAL	greater than 25

- (a) The potential emissions (as defined in the Indiana Rule) of PM10, NOx, and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in Indiana Rule) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in Indiana Rule) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the OAM 1996 emission data.

Pollutant	Actual Emissions (tons/year)
PM	25.72
PM-10	25.60
SO ₂	2.03
VOC	3.83
CO	10.35
HAP (specify)	0.00
NO _x	63.54

Limited Potential to Emit

The table below summarizes the total limited potential to emit of the significant emission units.

Process/ facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Total HAPs
AOD (DC-14)	13.66	13.66	--	--	--	--	12.02
ESR (DC-18)	20.64	20.64	--	0.10	--	36.22	18.16
EAF (DC-22)	46.17*	46.17*	5.26	3.94	--	7.01	40.63
Saw/Grind (DC-8)	11.23	1.12	--	--	--	--	9.88
Saw/Grind (DC-9)	11.27	1.12	--	--	--	--	9.92
Rotoblast (DC-10)	10.15	8.73	--	--	--	--	8.93
BlastRoom (DC-12)	8.76	7.53	--	--	--	--	7.71
Sawing (DC-13)	5.56	0.56	--	--	--	--	4.89
Cutting (DC-31)	13.15	1.32	--	--	--	--	11.57
Grinder (DC-32)	13.15	1.32	--	--	--	--	11.57
Rotoblast (DC-36)	8.87	7.63	--	--	--	--	7.81
Grind 1 (DC-1)	12.39	1.24	--	--	--	--	10.90
Grind 1 (DC-3)	6.57	0.66	--	--	--	--	5.78
Grind 1 (DC-4)	6.57	0.66	--	--	--	--	5.78
Grind 2 (DC-23C)	8.57	0.86	--	--	--	--	7.54
Grind 2 (DC-23B)	12.69	1.27	--	--	--	--	11.17

Process/ facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Total HAPs
Saw 1 (DC-2)	5.63	0.56	--	--	--	--	4.95
Saw 1 (DC-5)	6.57	0.66	--	--	--	--	5.78
Saw 1 (DC-23A)	12.69	1.27	--	--	--	--	11.17
Grinder (DC-37)	13.52	1.32	--	--	--	--	11.57
Pickling (FS-1)	--	--	--	--	--	39.00	0.36
Pickling (FS-2)	--	--	--	--	--	39.00	--
Natural gas combustion	11.46	11.46	0.90	8.29	126.88	150.81	--
Insignificant Activities	0.03	0.03	--	2.50	--	--	--
Total Emissions	258.93	129.77	6.16	14.83	126.88	272.04	218.11

(See Appendix A, page 1 of 3, for a detailed emissions summary.)

County Attainment Status

The source is located in Howard County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Howard county has been designated as attainment or unclassifiable for ozone.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

40 CFR 60, Subpart Dc (Standards for Small Boilers)

The two (2) boilers (Boilers 1 and 2) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60), Subpart Dc (Standard of Performance for Small Industrial-Commercial-Institutional Steam Generating Units that were constructed after June 9, 1989) because the boilers were constructed in 1965. Therefore, the requirements under 326 IAC 12 (40 CFR 60 Subpart Dc) do not apply.

40 CFR 60, Subpart AAa (Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels Constructed after August 7, 1983)

This plant melts purified metal ingot and produces alloys. No steel is manufactured at this source. Therefore, the EAF furnace and AOD vessel at Haynes International are not subject to this rule.

40 CFR 61, Subpart C (National Emission Standard for Beryllium)

Haynes International, Inc. has stated that Beryllium alloy is no longer processed at this plant. Therefore, 40 CFR 61, Subpart C (National Emission Standard for Beryllium) does not apply.

40 CFR 63 (National Emissions Standard for Hazardous Air Pollutants (NESHAP))

There are currently no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, applicable to this source. It is noted, however, that 40 CFR Part 63, Subpart CCC (National Emission Standards for Hazardous Air Pollutants for Steel Pickling Facilities - HCl Process) was issued as a proposed rule by the U. S. Environmental Protection Agency on September 18, 1997. In its proposed state, the rule is applicable to all new and existing steel pickling operations using an acid solution in which 50 percent or more by weight of the acid in solution is hydrochloric acid (HCl) and the source is a major HAP source. As proposed, the source would not be subject to the rule because it uses less than 50 percent HCl (by weight) in its pickling solution. However, if rule applicability changes upon final promulgation and the source becomes subject to Subpart CCC, the source will comply with the rule requirements.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is subject to 326 IAC 2-2 (PSD), because it qualifies as one of the 28 listed sources (secondary metal production) and has the potential to emit more than one hundred (100) tons per year of PM₁₀, NO_x, and CO. In order to avoid the regulations of 326 IAC 2-2 (Prevention of Significant Deterioration), the following limitations are necessary:

- (a) The five (5) 4-Hi mill preheat furnaces, the two (2) 4-Hi mill steckle furnaces, and the one (1) strip annealing furnace A&K were all constructed and operated without a permit in 1981. The potential NO_x emissions from the firing of natural gas in these furnaces exceed 40 tons per year (see Appendix A, page 5 of 5 for detailed calculations). The source qualified as a major PSD source under 326 IAC 2-2 in 1981, therefore, NO_x emissions must be limited to less than 40 tons per year to avoid the requirements of 326 IAC 2-2 for a major modification to a major PSD source. Therefore, the following operational limitations must be met:
 - 1) The usage of natural gas in the five (5) 4-Hi mill preheat furnaces, the two (2) 4-Hi mill steckle furnaces, and the one (1) strip annealing furnace A&K, shall be limited to a total of 780.0 million cubic feet (MMCF) per twelve (12) consecutive month period.

- 2) Compliance shall be demonstrated at the end of each month based on the total natural gas usage for the most recent twelve (12) consecutive month period. This natural gas usage limitation is required to limit NOx emissions to less than 40 tons per year to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21.
- (b) The R1 acid batch and R35 strip pickling lines were constructed in 1983 and 1989, respectively. The source qualified as a major PSD source under 326 IAC 2-2 in 1983 and 1989, therefore, NOx emissions from each of these pickling operations must not exceed 40 tons per year to avoid the requirements of 326 IAC 2-2 for a major modification to a major PSD source.
 - 1) The applicant will conduct a performance test on each of these facilities to determine if the fume scrubbers (FS-1 and FS-2) are controlling the NOx emissions from the R1 acid batch and R35 strip pickling operations to below 40 tons per year.
 - 2) If the required performance tests indicate that the potential to emit NOx, after controls, is equal to or greater than 40 tons per year, the Permittee shall limit production, or take any other steps necessary as approved by the Commissioner, to limit the potential to emit NOx from each of these facilities to less than 40 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM₁₀, NOx, and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2 (1), (2), or (3).

State Rule Applicability - Individual Facilities

326 IAC 2-1-3.4 (New Source Toxics Control)

326 IAC 2-1-3.4 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per year and potential emissions of a combination of HAPs greater than or equal to twenty-five (25) tons per year.

The rule does not apply to facilities that have been constructed before the effective date of this rule (July 27, 1997). The new CMI grinder (DC-37) was constructed November 18, 1997; however the single and combination HAP emissions from this facility are less than ten (10) and twenty-five (25) tons per year, respectively, and therefore, it is not subject to the requirements of 326 IAC 2-1-3.4 (New Source Toxics Control). All other facilities at the source were constructed prior to July 27, 1997, therefore 326 IAC 2-1-3.4 (New Source Toxics Control) is not applicable.

326 IAC 6-1-2(a) (Nonattainment Area PM Emissions Limitations)

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations), sources or facilities located in Howard County that are not specifically listed under 326 IAC 6-1-15, with potential PM emissions greater than 100 tons per year shall limit particulate matter (PM) to 0.03 grains per dry standard cubic foot of outlet air. The source wide potential PM emissions at Haynes is greater than 100 tons per year, (see Appendix A, page 1 of 3, for detailed emissions calculations), therefore, the particulate matter (PM) emissions from these facilities shall be controlled to 0.03 grain per dry standard cubic foot.

Facility	Control Device
AOD Vessel	DC-14
ESR Furnaces	DC-18
EAF Furnace	DC-22
Sawing and Grinding	DC-8
Sawing and Grinding	DC-9
Rotoblast	DC-10
Blast Room	DC-12
Abrasive cutting	DC-13
Abrasive cutting	DC-31
CMI Abrasive billet grinder	DC-32
Rotoblast	DC-36
Grind 1- Trackbound grinders	DC-1, DC-3, DC-4
Grind 2- Trackbound, end grinders	DC-23C, DC-23B
Saw 1- Cut-off, swing frame saws	DC-2, DC-5, DC-23A
CMI abrasive billet grinder	DC-37
R1 acid batch pickling	FS-1
R35 strip pickling	FS-2
R36 anneal and kolene *	FS-3
R24 weighing operation*	DC-33
Miscellaneous machining*	--

* These units are listed under insignificant activities.

The applicant will conduct performance testing for PM emissions from the EAF furnace, the AOD vessel, the electroslag remelt system, the R1 acid batch pickling operation, and the R35 strip pickling operation to determine if the units are in compliance with the emission limit specified above.

326 IAC 6-1-2(b) (Particulate Emissions Limitations: Fuel Combustion Steam Generators)

Pursuant to 326 IAC 6-1-2(b)(5), no person shall operate a fossil fuel combustion steam generator so as to discharge or cause to be discharged any gases unless such gases are limited to a particulate matter content of no greater than 0.01 grains per dry standard cubic foot (dscf) for all gaseous fuel-fired steam generators. The following natural gas-fired boilers are subject to this rule:

Facility	Boiler Rating (mmBtu/hr)
Boiler 1	16.0
Boiler 2	16.0
R42 steam heating boiler*	1.05
R1 high pressure wash boiler*	2.52
R1 pickle tank boiler*	2.10
R35 pickle line boiler *	1.50

* These units are listed under insignificant activities.

326 IAC 6-1-15 (Howard County PM Emissions Limits)

Haynes does not have any specifically regulated facilities under 326 IAC 6-1-15. Therefore, this rule is not applicable.

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

326 IAC 8-1-6 (General Reduction Requirements) applies to new facilities (as of January 1, 1980) which have potential emissions of 25 tons or more per year of VOC. All of the facilities at this source are each below the twenty-five (25) tons per year applicability threshold and, therefore, are not subject to the requirements of 326 IAC 8-1-6.

326 IAC 8-3-2 and 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The eighteen (18) separate cold cleaner degreasers and the large mill bearing degreaser (see insignificant activities) are subject to the requirements specified below:

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment 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 (38°C) (one hundred degrees Fahrenheit (100°F));
 - (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 (38°C) (one hundred degrees Fahrenheit (100°F)), 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 (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-4-6 (Gasoline Dispensing Facilities)

Pursuant to 326 IAC 8-4-1(e), *Applicability*, the requirements of 326 IAC 8-4-6 do not apply to gasoline dispensing facilities that have a monthly gasoline throughput of less than ten thousand (10,000) gallons per month and were in existence prior to July 1, 1989. The 330 gallon gasoline storage tank and dispensing operation (see insignificant activities) was installed at the source prior to July 1, 1989 and the source dispenses well below 10,000 gallons of gasoline per month. Therefore, the requirements of 326 IAC 8-4-6 do not apply to this source.

326 IAC 8-6 (Organic Solvent Emission Limitations)

Pursuant to 326 IAC 8-6-1, this rule applies to existing sources as of January 1, 1980, located in Lake and Marion Counties, and sources commencing operation after October 7, 1974 and prior to January 1, 1980 located anywhere in the state with potential VOC emissions of 100 tons per year. None of the facilities at this source are subject to the requirements of 326 IAC 8-6 as the VOC emissions from all organic solvents does not equal or exceed 100 tons per year.

326 IAC 9-1 (Carbon Monoxide Emission Rules)

Pursuant to 326 IAC 9-1, this rule applies to all stationary sources of carbon monoxide emissions commencing operation after March 21, 1972 that have a capacity of ten (10) tons per hour for smelting furnaces. Specifically, the regulation applies to petroleum refining emissions, ferrous metal smelters, and refuse incineration and burning equipment sources. This source is not one of the above mentioned sources, and therefore, is not subject to the requirements of 326 IAC 9-1.

326 IAC 11-1 (Emission Limitations for Specific Type of Operations)

Pursuant to 326 IAC 11-1-1, emission limitations are established for particulate matter from foundries. Particulate emissions from all foundries in operation on or before December 6, 1968 shall comply with the requirements set forth in section 2 of this rule and shall comply with 326 IAC 6-3 or 326 IAC 6-1. All of the facilities at this source are subject to the requirements of 326 IAC 11-1-1 as the source commenced operation before 1968. All of the sources are in compliance with 326 IAC 6-1 and 326 IAC 6-3 and are therefore in compliance with the requirements of 326 IAC 11-1.

Compliance Requirements

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

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

The compliance monitoring requirements applicable to this source are as follows:

1. The AOD, ESR, EAF, grinders and saws (DC-1, DC-2, DC-3, DC-4, DC-5, DC-14, DC-18, DC-22, DC-23A, DC-23B, DC-23C, DC-31, DC-32, DC-37), and the shot blaster (DC-36), have applicable compliance monitoring conditions as specified below:
 - (a) Daily visible emissions notations of the exhaust stacks shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (b) The Permittee shall record the total static pressure drop across each of the dust collectors listed below controlling the AOD, ESR, EAFs, saws, grinders, and blasters listed above, at least once daily when the units are in operation.

Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each of the dust collectors shall be maintained within the range specified below or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

- (c) An inspection shall be performed each calendar quarter of all bags controlling the melting, grinding, and sawing operations listed below when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

<u>Facility</u>	<u>Pressure Drop (inches of water)</u>
AOD (DC-14):	4.0 - 5.0
ESR (DC-22):	2.0 - 3.0
EAF(DC-18):	4.0 - 5.0
Saw/Grind (DC-31):	4.0 - 5.0
Rotoblast (DC-36):	1.5 - 2.5
Grinders (DC-1, DC-3, and DC-4):	4.0 - 5.0 each
Grinders (DC-C and DC-23B):	4.0 - 5.0 each
Sawing (DC-2, DC-5, and DC-23A):	4.0 - 5.0 each
CMI grinder (DC-32):	4.0 - 5.0
CMI grinder (DC-37):	4.0 - 5.0

These monitoring conditions are necessary because the dust collectors for AOD, ESR, EAF, grinders and saws (DC-1, DC-2, DC-3, DC-4, DC-5, DC-14, DC-18, DC-22, DC-23A, DC-23B, DC-23C, DC-31, DC-32, DC-37), and the shot blaster (DC-36), must operate properly to ensure compliance with 326 IAC 6-1-2(a) (Nonattainment Area PM Emissions Limitations) and 326 IAC 2-7 (Part 70).

2. That the fume scrubbers identified as FS-1 and FS-2 shall be operated at all times when the R1 batch pickling and R35 strip pickling units are in operation, respectively.
- (a) Daily visible emissions notations of the exhaust stacks shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
- (b) The Permittee shall monitor and record the pH and flow rate of the scrubber, at least once daily when the units are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH and flow rate across each of the scrubbers shall be maintained within the range specified below or a range established during the latest stack test.

The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the acid content and flow rate readings are outside of the following ranges for any one reading:

<u>Scrubber</u>	<u>Flow rate</u>	<u>pH</u>
FS-1	36 gallons per minute	10-11
FS-2	75 gallons per minute	above 10

- (c) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced

These monitoring conditions are necessary because the fume scrubbers (FS-1, FS-2) must operate properly to ensure compliance with 326 IAC 6-1-2(a) (Nonattainment area PM Emissions Limitations) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act.
- (b) See attached calculations for detailed air toxic calculations.

Conclusion

The operation of this nonferrous metals extruding foundry shall be subject to the conditions of the attached proposed **Part 70 Permit No. T067-7729-00009**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Background and Description

Source Name: Haynes International, Inc.
Source Location: 2000 West Deffenbaugh Street, Kokomo, IN 46904
County: Howard
SIC Code: 3356
Operation Permit No.: T067-7729-00009
Permit Reviewer: Jeremy Magliaro/EVP

On October 25, 1998, the Office of Air Management (OAM) had a notice published in the Kokomo Tribune, Kokomo, Indiana, stating that Haynes International, Inc. had applied for a Part 70 Operating Permit for the operation of their rolling, drawing, and extruding of nonferrous metal foundry operation that produces nonferrous metal alloys.. The notice also stated that OAM proposed to issue a permit for this installation 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.

On November 23, 1998, Haynes International, Inc. submitted comments on the proposed Part 70 Permit. The summary of the comments is as follows:

Comment #1

Regarding Condition A.2 (Emission Units and Pollution Control Equipment Summary) and Section D.1, please revise the equipment listing for the EAF furnace to indicate that it is controlled by a five (5) module dust collector and exhausted through five (5) ducts (DC-22(1),(2),(3),(4),(5); and revise the equipment listing for the rotoblast shotblaster controlled by DC-36 to indicate that the exhaust is not vented to the atmosphere, but rather DC-36 is vented through HEPA filters and back inside building R35.

Response #1

The equipment listing summary in Condition A.2 and Section D.1 have been revised as follows:

- (3) One (1) electric arc furnace (EAF) processing a metal throughput of 5.0 tons per hour with a **five (5) module** dust collector for particulate matter control and exhausting to ~~one (1) stack~~ **five (5) ducts** (S/V ID: DC-22(1), DC-22(2), DC-22(3), DC-22(4), and DC-22(5), respectively);
- (6) One (1) rotoblast shot blaster processing a metal throughput of 8.0 tons per hour with a dust collector (**DC-36**) for particulate matter control and exhausting **inside the building R35**; to ~~one (1) stack (S/V ID: DC-36)~~;

Comment #2

Regarding Condition D.1.6 (Parametric Monitoring), please correct the equipment listing and corresponding control device listings to indicate that the electric arc furnace (EAF) is controlled by DC-22 and the electroslag remelt furnaces (ESR) are controlled by DC-18). Please correct the “Grinders” to indicate that they are controlled by DC-23C and DC-23B, accordingly. Please change the baghouse pressure drop operating ranges for the emission control devices to reflect current operating status as follows:

<u>Facility</u>	<u>New Pressure Drop (inches of water)</u>
AOD (DC-14):	2.0 - 4.0
ESR (DC-18):	6.0 - 8.0
EAF(DC-22):	3.0 - 5.0
Saw/Grind (DC-31):	2.0 - 4.0
Rotoblast (DC-36):	1.0 - 3.0
Grinders (DC-1, DC-3, and DC-4):	2.0 - 4.0 each
Grinders (DC-23C and DC-23B):	2.0 - 4.0 each
Sawing (DC-2, DC-5, and DC-23A):	2.0 - 4.0 each
CMI grinder (DC-32):	2.0 - 4.0
CMI grinder (DC-37):	2.0 - 4.0

Response #2

The following changes have been made to Condition D.1.6 (Parametric Monitoring):

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the facilities mentioned below, at least once daily when the facilities are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range specified below or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

<u>Facility</u>	<u>Pressure Drop (inches of water)</u>
AOD (DC-14):	4.0 - 5.0 2.0 - 4.0
ESR (DC- 22 18):	2.0 - 3.0 6.0 - 8.0
EAF(DC- 18 22):	4.0 - 5.0 3.0 - 5.0
Saw/Grind (DC-31):	4.0 - 5.0 2.0 - 4.0
Rotoblast (DC-36):	1.5 - 2.5 1.0 - 3.0
Grinders (DC-1, DC-3, and DC-4):	4.0 - 5.0 each 2.0 - 4.0 each
Grinders (DC- 23C and DC-23B):	4.0 - 5.0 each 2.0 - 4.0 each
Sawing (DC-2, DC-5, and DC-23A):	4.0 - 5.0 each 2.0 - 4.0 each
CMI grinder (DC-32):	4.0 - 5.0 2.0 - 4.0
CMI grinder (DC-37):	4.0 - 5.0 2.0 - 4.0

Comment #3

Regarding Condition A.2 (Emission Units and Pollution Control Equipment Summary), during the next 18 months, Haynes plans to build a structure to house an existing insignificant propane torch cutting operation (Insignificant cutting operation listed under Part 70 permit section D.5). The torch cutting building will be connected and vented to DC-22.

Response #3

Upon further discussion, Haynes International, Inc. has agreed to inform IDEM when this insignificant activity is modified. Since this modification is still in the preliminary stages, no changes were made to this proposed Part 70 Operating Permit from this comment.

Comment #4

Haynes International, Inc. objects to the inclusion of the "credible evidence" provision (Condition B.28) in its Title V Operating Permit. Haynes feels strongly that the inclusion of the "credible evidence" provision is contrary to the spirit and intent of the IDEM Part 70 Permit Program. Haynes feels that the intent of the IDEM Part 70 program was to consolidate all emission sources and their corresponding emission control units into one source operating permit. Further this one single operating permit would set the exact limits and standards each effected unit would have to meet and the corresponding requirements and methods to be used to demonstrate compliance with those limits and standards.

Haynes feels that inclusion of the "credible evidence" provision places an overwhelming burden on effected sources to anticipate what is or is not "other credible evidence" and how that evidence can be used to bring a Clean Air Act case. In addition, haynes feels that the "credible evidence" provision increases the stringency of underlying emission standards to determine possible Clean Air Act violations. Please remove the "credible evidence" provision (Condition B.28) from the Haynes International, Inc., Air Operating Permit.

Response #4

IDEM, OAM now believes that this condition is not necessary and has removed it from the final permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit. Condition B.28 "Credible Evidence" has been deleted from the final permit as follows:

~~B.28 Credible Evidence [326 IAC 2-7-5(3)] [62 Federal Register 8313] [326 IAC 2-7-6]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

Comment #5

Please change the operating ranges listed in Condition D.3.7 for flow rate and pH for the fume scrubber FS-1 from 36 gallons per minute (gpm) to 150 gpm and the pH from a range of 10-11, to "above 10".

Response #5

The following changes have been made to Condition D.3.7(a), (Scrubber Monitoring):

D.3.7 Scrubber Monitoring

- (a) The Permittee shall monitor and record the pH and flow rate of the scrubber, at least once daily when the units are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH and flow rate across each of the scrubbers shall be maintained within the range specified below or a range established during the latest stack test. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the acid content and flow rate readings are outside of the following ranges for any one reading:

<u>Scrubber</u>	<u>Flow rate</u>	<u>pH</u>
FS-1	36 150 gallons per minute	above 10-11
FS-2	75 gallons per minute	above 10

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

1. Section D.2 has been revised to include a visible emissions notation requirement as Condition D.2.5 (following conditions have been renumbered accordingly). This is required to indicate that the facilities are in compliance with 326 IAC 5-1 and 326 IAC 6, and to indicate to the source whether or not a problem exists in the operation. A record keeping requirement, Condition D.2.7 has also been added accordingly as follows:

D.2.5 Visible Emissions Notations

- (a) **Daily visible emission notations of the stack exhaust from each facility shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.**
- (b) **For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.**
- (c) **In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.**
- (d) **A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.**
- (e) **The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.**

D.2.7 Record Keeping Requirements

- (a) **To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the facilities stack exhausts.**
- (b) **All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.**

2. Conditions D.1.8 and D.2.5 (now D.2.6) (Broken Bag or Failure Detection), has been revised as follows to clarify the requirement.

D.1.8 ~~Broken or Failed Bag or Failure Detection~~

D.2.6 ~~Broken or Failed Bag or Failure Detection~~

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated.**

For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (b) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

3. Condition C.2 (Opacity) has been revised to reflect a change in the rule.

C.2 Opacity [326 IAC 5-1]

~~Pursuant to 326 IAC 5-1-2 (Visible Emissions Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions opacity shall meet the following, unless otherwise stated in this permit:~~

- (a) ~~Visible Emissions Opacity shall not exceed an average of thirty percent (30%) opacity in any one (1) six (6) minute averaging period in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.~~
- (b) ~~Visible Emissions Opacity shall not exceed sixty percent (60%) opacity 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.~~

4. Condition D.1.3(b) has been revised as follows to clarify the need for a carbon monoxide test:

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (b) During the period within 36 months after issuance of this permit, the Permittee shall perform a one (1) time Carbon Monoxide (CO) test on the electric arc furnace (EAF) utilizing Method 10 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner **to determine an emission factor for the facility to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration).** In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Appendix A: Emission Calculations

Company Name: Haynes, International, Inc.
Address City IN Zip: 2000 West Deffenbaugh Street, Kokomo, IN 46904
Title V: T067-7729-00009
Reviewer: JM/EVP
Date: August 18, 1998

Uncontrolled Potential Emissions (tons/year)								
	PM	PM-10	SO ₂	NO _x	VOC	CO	Single HAP*	Total HAPs*
AOD Vessel (DC-14)	1,366.41	1,366.41	--	--	--	--	1,024.81	1,202.44
ESR Furnaces (DC-18) (a)	2,064.42	2,064.42	0.00	36.22	0.10	--	1,548.32	1,816.69
EAF Furnace (DC-22) (b)	5,169.54	5,169.54	5.26	7.01	3.94	--	3,877.16	4,549.20
Grind/Saw (DC-8)	1,122.53	112.25	--	--	--	--	841.90	987.83
Grind/Saw (DC-9)	1,127.41	112.74	--	--	--	--	845.56	992.12
Rotoblast (DC-10)	1,014.67	872.62	--	--	--	--	761.00	892.91
Blast Room (DC-12)	875.62	753.03	--	--	--	--	656.72	770.55
Sawing (DC-13)	556.39	55.64	--	--	--	--	417.29	489.62
Sawing (DC-31)	1,314.74	131.47	--	--	--	--	986.06	1,156.97
Grinder (DC-32)	1,314.74	131.47	--	--	--	--	986.06	1,156.97
Rotoblast (DC-36)	886.61	762.48	--	--	--	--	664.96	780.22
Grind 1 (DC-1, DC-3, DC-4)	2,553.78	255.38	--	--	--	--	1,915.34	2,247.33
Grind 2 (DC-23C, DC-23B)	2,125.49	212.55	--	--	--	--	1,594.12	1,870.43
Saw 1 (DC-2, DC-5, DC-23A)	2,489.10	248.91	--	--	--	--	1,866.83	2,190.41
CMI Grinder (DC-37)	1,314.74	131.47	--	--	--	--	986.06	1,156.97
Fume Scrubber (FS-1) (c)	--	--	--	--	--	--	2.15	3.54
Fume Scrubber (FS-2) (c)	--	--	--	--	--	--	--	--
Natural gas combustion	12.16	12.16	0.96	159.99	8.80	134.39	--	--
Insignificant Activities (d)	3.50	3.50	--	--	2.50	--	--	--
TOTAL Uncontrolled PE	25,311.85	12,396.06	6.22	203.22	15.34	134.39	18,974.29	22,264.19

(a) Potential NO_x and VOC emissions were provided by the applicant and calculated using AIRS.

The emission factors of 1.5 lb NO_x/ton throughput and 0.004 lb VOC/ton throughput were used.

(b) Potential SO₂, NO_x, and VOC emissions were provided by the applicant and calculated using Fire 5.0.

The emission factors of 0.24 lbs SO₂/ton, 0.32 lbs NO_x/ton, and 0.18 lbs VOC/ton of throughput were used.

(c) There was no data available on the fume scrubbers controlling the R1 and R35 pickling operations. The applicant will perform stack testing PM and NO_x to determine emissions.

The potential to emit NO_x from both the R1 and R35 pickling operations shall each not exceed 40 tons per year to avoid 326 IAC 2-2 (PSD).

(d) Includes estimated potential emissions from the insignificant degreasing operations and the insignificant R-24 weigh room controlled by DC-33.

* Single HAP emissions from the melting and machining operations listed above were calculated using a worst case 75% Nickel PM fraction in Alloy 214.

* Total HAP emissions were calculated using a worst-case 88% Cobalt/Chromium PM fraction in Alloy 6B.

The PM10 emissions from the sawing/cutting/and grinding operations were calculated using a 0.1 lb PM10 / lb PM ratio pursuant to Fire 5.0 SCC# 3-04-003-40 (grinding and cleaning

The PM from the AOD, ESR, and EAF furnaces is considered all PM10 since there is no emission factor ratio available.

The PM10 emissions from the blasting ops (DC-10, DC-12, and DC-36) were calculated using a 0.86 lb PM10/ lb PM ration pursuant to Stappa Alapco, Section 3 for steel shot media,

Limited/Controlled Potential to Emit (tons/year)								
	PM	PM-10	SO ₂	NO _x	VOC	CO	Single HAP	Total HAPs
AOD Vessel (DC-14)	13.66	13.66	--	--	--	--	10.25	12.02
ESR Furnaces (DC-18) (a)	20.64	20.64	0.00	36.22	0.10	--	15.48	18.16
EAF Furnace (DC-22) (b)	46.17	46.17	5.26	7.01	3.94	--	34.63	40.63
Grind/Saw (DC-8)	11.23	1.12	--	--	--	--	8.42	9.88
Grind/Saw (DC-9)	11.27	1.13	--	--	--	--	8.45	9.92
Rotoblast (DC-10)	10.15	8.73	--	--	--	--	7.61	8.93
Blast Room (DC-12)	8.76	7.53	--	--	--	--	6.57	7.71
Sawing (DC-13)	5.56	0.56	--	--	--	--	4.17	4.89
Sawing (DC-31)	13.15	1.32	--	--	--	--	9.86	11.57
Grinder (DC-32)	13.15	1.32	--	--	--	--	9.86	11.57
Rotoblast (DC-36)	8.87	7.63	--	--	--	--	6.65	7.81
Grind 1 (DC-1, DC-3, DC-4)	25.53	2.55	--	--	--	--	19.15	22.47
Grind 2 (DC-23C, DC-23B)	21.26	2.13	--	--	--	--	15.95	18.71
Saw 1 (DC-2, DC-5, DC-23A)	24.89	2.49	--	--	--	--	18.67	21.90
CMI Grinder (DC-37)	13.15	1.32	--	--	--	--	9.86	11.57
Fume Scrubber (FS-1)	--	--	--	39.00	--	--	0.32	0.36
Fume Scrubber (FS-2)	--	--	--	39.00	--	--	--	--
Natural gas combustion	11.46	11.46	0.90	150.81	8.29	126.68	--	--
Insignificant Activities (d)	0.03	0.03	--	--	2.50	--	--	--
TOTAL Controlled PTE	258.93	129.77	6.16	272.04	14.83	126.68	185.90	218.11

See Appendix A, pages 2-3 for detailed emissions calculations of the units listed above.

Appendix A: Process Particulate Emissions

Company Name: Haynes, International, Inc.
 Address City IN Zip: 2000 West Deffenbaugh Street, Kokomo, IN 46904
 Title V: T067-7729-00009
 Reviewer: JM/EVP
 Date: August 18, 1998

Potential Emissions (tons/year)															
Process	Dust Collector ID	No. of Units	acfm	Gas Temp F	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft²)	Total Filter Area (ft²)	Control Efficiency	Potential PM Emissions (tons/yr) Uncontrolled	Potential PM Emissions (tons/yr) Controlled	dscfm	grains/dscf	Allowable PM Emissions (lb/hr) (326 IAC 6-1-2)	Allowable PM Emissions (tons/yr) (326 IAC 6-1-2)	In Compliance with 326 IAC 6-1-2
AOD Vessel	DC-14	1	70,000	250	0.00520	3.7	19,176	99.00%	1366.41	13.66	41,645	0.009	10.71	46.90	(will comply)
ESR Furnaces	DC-18	1	27,500	95	0.02000	5.6	4,945	99.00%	2064.42	20.64	20,930	0.026	5.38	23.57	(will comply)
EAF Furnace	DC-22	1	68,900	250	0.02000	2.5	27,650	99.00%	5169.54	51.70	40,991	0.034	10.54	46.17	(will not comply)
Sawing and Grinding	DC-8	1	15,000	68	0.02000	2.0	7,475	99.00%	1122.53	11.23	12,000	0.025	3.09	13.52	(will comply)
Sawing and Grinding	DC-9	1	15,000	68	0.02000	3.0	5,005	99.00%	1127.41	11.27	12,000	0.025	3.09	13.52	(will comply)
Rotoblast	DC-10	1	13,500	68	0.02000	2.7	5,005	99.00%	1014.67	10.15	10,800	0.025	2.78	12.16	(will comply)
Blast Room	DC-12	1	11,650	68	0.02000	2.3	5,005	99.00%	875.62	8.76	9,320	0.025	2.40	10.50	(will comply)
Abrasive cutting	DC-13	1	7,410	68	0.02000	3.0	2,470	99.00%	556.39	5.56	5,928	0.025	1.52	6.68	(will comply)
Abrasive cutting	DC-31	1	17,500	68	0.02000	6.6	2,653	99.00%	1314.74	13.15	14,000	0.025	3.60	15.77	(will comply)
CMI Abrasive billet grinder	DC-32	1	17,500	68	0.02000	6.6	2,653	99.00%	1314.74	13.15	14,000	0.025	3.60	15.77	(will comply)
Rotoblast	DC-36	1	11,800	68	0.02000	1.6	7,200	99.00%	886.61	8.87	9,440	0.025	2.43	10.63	(will comply)
Grind 1- Trackbound grinder	DC-1	1	16,500	68	0.02000	6.2	2,653	99.00%	1239.04	12.39	13,200	0.025	3.39	14.87	(will comply)
Grind 1- Trackbound grinder	DC-3	1	17,500	68	0.01000	6.6	2,653	99.00%	657.37	6.57	14,000	0.013	3.60	15.77	(will comply)
Grind 1- Trackbound grinder	DC-4	1	17,500	68	0.01000	6.6	2,653	99.00%	657.37	6.57	14,000	0.013	3.60	15.77	(will comply)
Grind 2-Trackbound grinder	DC-23C	1	11,400	68	0.02000	4.3	2,653	99.00%	856.57	8.57	9,120	0.025	2.35	10.27	(will comply)
Grind 2-Stationary end grinder	DC-23B	1	16,900	68	0.02000	6.4	2,653	99.00%	1268.92	12.69	13,520	0.025	3.48	15.23	(will comply)
Saw 1-Fox cut off saw	DC-2	1	7,500	68	0.02000	8.3	902	99.00%	562.81	5.63	6,000	0.025	1.54	6.76	(will comply)
Saw 1-Swing frame saw	DC-5	1	17,500	68	0.01000	6.6	2,653	99.00%	657.37	6.57	14,000	0.013	3.60	15.77	(will comply)
Saw 1-Swing frame saw	DC-23A	1	16,900	68	0.02000	6.4	2,653	99.00%	1268.92	12.69	13,520	0.025	3.48	15.23	(will comply)
CMI abrasive billet grinder	DC-37	1	17,500	68	0.02000	6.6	2,653	99.00%	1314.74	13.15	14,000	0.025	3.60	15.77	(will comply)
Total Emissions Based on Rated Capacity at 8,760 Hours/Year									25296.18	252.96				340.60	

The applicant will conduct a performance test on the EAF furnace for PM to determine compliance with 326 IAC 6-1-2.

Methodology:

Potential (uncontrolled):

$$\text{Baghouse (tons/yr)} = \text{No. Units} * \text{Loading (grains/acf)} * \text{Air/Cloth Ratio (acfm/ft}^2\text{)} * \text{Filter Area (ft}^2\text{)} * 1 \text{ lb/7,000 grains} * 60 \text{ min/hr} * 8760 \text{ hr/yr} * 1 \text{ ton/2,000 lbs} * 1/(1-\text{Control Efficiency})$$

Potential (controlled):

$$\text{Baghouse (tons/yr)} = \text{No. Units} * \text{Loading (grains/acf)} * \text{Air/Cloth Ratio (acfm/ft}^2\text{)} * \text{Filter Area (ft}^2\text{)} * 1 \text{ lb/7,000 grains} * 60 \text{ min/hr} * 8760 \text{ hr/yr} * 1 \text{ ton/2,000 lbs}$$

Compliance with 326 IAC 6-1-2

The following calculations determine compliance with 326 IAC 6-1-2 (for counties listed in 326 IAC 6-1-7) to 0.03 grains/dscf of outlet air.

A sample calculation is given below of unit AOD:

$$\frac{13.66 \text{ ton/yr} * 2000 \text{ lb/ton} * 7000 \text{ gr/lb}}{525,600 \text{ min/yr} * 41,645 \text{ dscf/min}} = 0.009 \text{ gr/dscf} \quad (\text{will comply})$$

Allowable particulate emissions under 326 IAC 6-1-2 equate to 46.90 tons per year, or 10.71 lbs/hr.

Note:

$$\text{SCFM} = \frac{70,000 \text{ acfm} * (460 + 68) * (1.0 - 0.2)}{41,645 \text{ scfm}} = \frac{4,600,000}{41,645} = 110.22$$

Assumes exhaust gas temperature of 250F, exhaust gas moisture content of 20% and exhaust gas flow of 70,000 acfm.

Natural Gas Combustion

Company Name: Haynes, International, Inc.
 Address City IN Zip: 2000 West Deffenbaugh Street, Kokomo, IN 46904
 Title V: T067-7729-00009
 Reviewer: JM/EVP
 Date: August 18, 1998

NATURAL GAS COMBUSTION EMISSIONS

SOURCE	Number of Furnaces	mmbtu/hr Rating	Annual Hrs Operation	Annual Nat. Gas (mmcf)	POTENTIAL TO EMIT									
					PM/PM10		SO2		NOX		CO		VOC	
					(lb/hr)	(Ton/Yr)	(lb/hr)	(Ton/Yr)	(lb/hr)	(Ton/Yr)	(lb/hr)	(Ton/Yr)	(lb/hr)	(Ton/Yr)
Boilers 1+2	2	16.00	8760.0	280.3	0.24	1.07	0.02	0.08	3.20	14.02	2.69	11.77	0.18	0.77
3-Hi mill preheat	4	10.35	8760.0	362.7	0.31	1.38	0.02	0.11	4.14	18.13	3.48	15.23	0.23	1.00
Annealing	1	22.00	8760.0	192.7	0.17	0.73	0.01	0.06	2.20	9.64	1.85	8.09	0.12	0.53
24" Bar mill preheat	4	9.00	8760.0	315.4	0.27	1.20	0.02	0.09	3.60	15.77	3.02	13.25	0.20	0.87
Car bottom annealing	1	5.40	8760.0	47.3	0.04	0.18	0.00	0.01	0.54	2.37	0.45	1.99	0.03	0.13
10" Bar mill preheat	2	9.00	8760.0	157.7	0.14	0.60	0.01	0.05	1.80	7.88	1.51	6.62	0.10	0.43
Annealing	1	16.00	8760.0	140.2	0.12	0.53	0.01	0.04	1.60	7.01	1.34	5.89	0.09	0.39
Annealing	1	12.00	8760.0	105.1	0.09	0.40	0.01	0.03	1.20	5.26	1.01	4.42	0.07	0.29
Forge shop preheat	5	7.80	8760.0	341.6	0.30	1.30	0.02	0.10	3.90	17.08	3.28	14.35	0.21	0.94
Forge shop preheat	1	9.00	8760.0	78.8	0.07	0.30	0.01	0.02	0.90	3.94	0.76	3.31	0.05	0.22
Annealing	1	7.80	8760.0	68.3	0.06	0.26	0.00	0.02	0.78	3.42	0.66	2.87	0.04	0.19
car bottom annealing	1	4.00	8760.0	35.0	0.03	0.13	0.00	0.01	0.40	1.75	0.34	1.47	0.02	0.10
4-Hi mill preheat*	5	15.00	8760.0	657.0	0.57	2.50	0.05	0.20	7.50	32.85	6.30	27.59	0.41	1.81
4-Hi mill steckle*	2	20.00	8760.0	350.4	0.30	1.33	0.02	0.11	4.00	17.52	3.36	14.72	0.22	0.96
Strip Annealing A+K*	1	10.00	8760.0	87.6	0.08	0.33	0.01	0.03	1.00	4.38	0.84	3.68	0.06	0.24
R1 pickle tank boiler	1	2.10	8760.0	18.4	0.02	0.07	0.00	0.01	0.21	0.92	0.18	0.77	0.01	0.05
R1 HP Wash boiler	1	2.52	8760.0	22.1	0.02	0.08	0.00	0.01	0.25	1.10	0.21	0.93	0.01	0.06
R35 Pickle Boiler	1	1.50	8760.0	13.1	0.01	0.05	0.00	0.00	0.15	0.66	0.13	0.55	0.01	0.04
R36 Kolene tank heater	1	5.50	8760.0	48.2	0.04	0.18	0.00	0.01	0.55	2.41	0.46	2.02	0.03	0.13
R42 Steam Boiler	1	1.05	8760.0	9.2	0.01	0.03	0.00	0.00	0.11	0.46	0.09	0.39	0.01	0.03
COMBUSTION TOTALS, TONS/YR.						12.66		1.00		166.56		139.91		9.16

NOTE: Assume that the heating value of natural gas is 1000 Btu / Cubic Foot.

SAMPLE CALCULATION	MMCF	X	LB	X	TONS	=	TONS
	YR		MMCF		LB		YR

UNITS	Natural Gas Emission Factors		
	Rated Capacity, MMbtu/hr		
	0 - 0.3	0.3-100	> 100
	Lb/ MMCF		
PM**	7.6	7.6	7.6
SO2	0.6	0.6	0.6
NOx	94	100	190
CO	40	84	84
VOC	5.5	5.5	5.5
SOURCE	AP-42, Chapter 1.4		

* The 4-hi mill preheat, 4-hi mill steckle, and strip annealing A+K furnaces listed above shall limit total natural gas usage to 780.0 mmcf per year to avoid 326 IAC 2-2 (PSD).

** All PM is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM10, PM2.5, and PM1 emissions.