



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027

www.in.gov/idem

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Ironside Energy, LLC
a contractor of ISG-Indiana Harbor, Inc.
3001 Dickey Road
East Chicago, Indiana 46312-1610**

(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.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

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 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T089-11557-00448	
Issued by: Original signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: November 12, 2004 Expiration Date: November 12, 2009

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.3, and A.4 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)] [326 IAC 2-7-1(22)]

The Permittee owns and operates an industrial steam and electric power cogeneration plant.

Responsible Official:	John Prunkl
Source Address:	3001 Dickey Road, East Chicago, Indiana 46312-1610
Mailing Address:	Primary Energy Steel LLC, 2000 York Road, Suite 129, Oak Brook, IL 60523
Phone Number:	(219) 647-6065
SIC Code:	4911
County Location:	Lake
Source Location Status:	Nonattainment for SO ₂ , 1-hour ozone and 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD, Emission Offset Rules and Nonattainment NSR; Major Source, Section 112 of the Clean Air Act

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

ISG-Indiana Harbor, Inc. is a fully integrated steelmaking and finishing facility consists of a source with on-site contractors:

- (a) ISG-Indiana Harbor Inc., (089-00318) the primary operation, is located at, 3001 Dickey Road, East Chicago, Indiana 46312; and
- (b) Ironside Energy, LLC, (089-00448) the on-site contract operation (a cogeneration facility), is located at 3001 Dickey Road, East Chicago, Indiana.

IDEM has determined that ISG-Indiana Harbor Inc. and Ironside Energy, LLC are under the common control of ISG-Indiana Harbor Inc. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to ISG-Indiana Harbor Inc. and Ironside Energy, LLC as one source.

Separate Part 70 permits will be issued to ISG-Indiana Harbor Inc. and Ironside Energy, LLC solely for administrative purposes. For permitting purposes, ISG-Indiana Harbor Inc. is assigned Permit No. 089-7099-00318 and Ironside Energy, LLC is assigned Permit No. 089-11557-00448.

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

Ironside Energy, LLC consists of the following permitted emission units and pollution control devices:

- (a) One industrial boiler, identified as Boiler No. 9, equipped with low-NOx burners, installed in 2001. The boiler has a nominal heat input rate of 657 MMBtu per hour and a continuous nominal steam production rate of 460,000 pounds of steam per hour. The primary fuel will be blast furnace gas (BFG) with natural gas as a backup/supplemental fuel.
- (b) One steam turbine electric generator with a nominal rate of 50 MW; and
- (c) One cooling tower.

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

Ironside Energy, LLC consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) The following VOC and HAP storage containers:
 - (A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9]
- (2) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1-2]

A.5 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 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, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 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 initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications 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 April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
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, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, 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.10 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 (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and

maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

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

- (b) The Permittee shall implement the PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 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.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a 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, OAQ, and Northwest Regional Office, 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 Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

Northwest Regional Office telephone number: 219-757-0265

Northwest Regional Office Facsimile Number: 219-757-0267

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or

facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
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). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, 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, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) 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.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that 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 either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) 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, IDEM, OAQ, 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.
- (c) 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. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) 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.
- (e) 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).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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

B.14 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 Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent.

A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 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)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, 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, OAQ, 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, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. 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). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
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, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ, 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, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, 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.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by 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 Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 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) 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.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (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 preconstruction approval required by 326 IAC 2-7-10.5 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 Quality
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, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).
- (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). 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, is not considered an application form, report or compliance certification. Therefore, the notification 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, OAQ, or U.S. EPA is required.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application, 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) 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.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. In the event that the source is a sub-contractor and is combined with a larger Part 70 source, the larger Part 70 source may pay the Permittees' annual fees as part of the larger source billing and subject to the fee cap of the larger source. If, however, the larger Part 70 source does not pay its annual Part 70 permit fee, IDEM, OAQ will assess a separate fee in accordance with 326 IAC 2-7-19(c) to be paid by the Permittee. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), 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 317-233-4230 (ask for Billing, Licensing, and Training Section (BLT)), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 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.3 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. 326 IAC 9-1-2 is not federally enforceable.

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

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

C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

- (a) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:
 - (1) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
 - (2) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
 - (3) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
 - (4) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
 - (5) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
 - (6) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

- (7) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
 - (8) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
 - (9) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
 - (10) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
 - (11) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.
- (b) The source is subject to 326 IAC 6-1-11.2 because it is subject to the requirements of 326 IAC 6-1-11.1 and 326 IAC 6-1-10.1(d). Pursuant to this rule, the source shall comply with parts (h), (i), (k), (l), (m), (o), (p) and (q) of this rule.

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

Except as otherwise provided by statute or rule, or in this permit, 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]

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. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(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 any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later

than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
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).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) 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 (2%) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument 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 (2%) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately

ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

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

C.14 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 Quality
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 require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, 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, OAQ, 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.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth

in the Permittee's current Compliance Response Plan [or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan)] and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) to include such response steps taken.

The OMM Plan (or Parametric Monitoring and SSM Plan) shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirements.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan [or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan)]; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and 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 a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are 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.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 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 response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by 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.18 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) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants (as defined by 326 IAC 2-7-1(32)) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

The statement must be submitted to:

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

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

- (b) The 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, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

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

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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 Quality
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, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 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)]

Ironside Energy, LLC consists of the following permitted emission units and pollution control devices:

- (a) One industrial boiler, identified as Boiler No. 9, equipped with low-NOx burners, installed in 2001. The boiler has a nominal heat input rate of 657 MMBtu per hour and a continuous nominal steam production rate of 460,000 pounds of steam per hour. The primary fuel will be blast furnace gas (BFG) with natural gas as a backup/supplemental fuel;
- (b) One steam turbine electric generator with a nominal rate of 50 MW; and
- (c) One cooling tower.

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

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

D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source, as designated by 40 CFR 63.7506(b). The Permittee must comply with these requirements on and after the effective date of 40 CFR 63, Subpart DDDDD.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition. The permit shield applies to Condition D.1.14, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD-Notification Requirements.

D.1.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

- (a) The affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart DDDDD on and after three years after the effective date of 40 CFR 63, Subpart DDDDD.
- (b) Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.
- (c) The following emissions unit comprises the affected source for the large gaseous fuel subcategory: Boiler No. 9.
- (d) The definitions of 40 CFR 63, Subpart DDDDD at 40 CFR 63.7575 are applicable to the affected source.

D.1.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

Boiler No. 9 shall comply with the provisions of 40 CFR 60, Subpart A (NSPS General Provisions) and 40 CFR 60, Subpart Db (NSPS for Industrial Steam Generating Units) which are incorporated by reference in 326 IAC 12-1.

D.1.4 PSD and Emissions Offset [326 IAC 2-2 and 326 IAC 2-3]

- (a) Pursuant to CP089-10842-00448 issued on February 2, 2000, the natural gas fuel usage of

Boiler No. 9 shall not exceed 2080 MMBtu per twelve (12) month total, rolled on a monthly basis, the NO_x emissions from natural gas combustion in Boiler No. 9 shall not exceed 56.3 tons per twelve (12) month total, rolled on monthly basis. This limitation renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

- (b) Pursuant to CP089-10842-00448 issued on February 2, 2000, the existing Boiler No. 4 with a heat input rate of 260 MMBtu per hour, which is owned and operated by ISG-Indiana Harbor Works (formerly LTV) shall be permanently removed from service upon commercial operation of Boiler No. 9 to render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (PSD) not applicable.

D.1.5 Nitrogen Oxides (NO_x) Emission Limitations [326IAC 12][40 CFR Part 60.44]

Pursuant to 40 CFR Part 60.44b(l) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR Part 60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following limits:

- (1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/JI (0.20 lb/million Btu) heat input; or
- (2) If the affected facility has a low heat release rate and combusts natural gas in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$$En = [(0.10 * Hgo) + (0.20 * Hr)] / (Hgo + Hr)$$

Where:

En is the NO_x emission limit, (lb/million Btu),
Hgo is the heat input from combustion of natural gas or distillate oil, and
Hr is the heat input from combustion of any other fuel. (for Ironside at ISG this is Blast Furnace Gas)

D.1.6 Particulate Matter (PM and PM₁₀) Emission Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the gaseous fuel-fired boiler is subject to the "fuel combustion steam generator" category requirements (326 IAC 6-1-2(b)(3)) which limits the particulate matter emissions from gaseous fuel-fired combustion to no more than 0.01 grains per dry standard cubic feet (dscf) as measured using 40 CFR 60, Appendix A, Method 5.

D.1.7 Nitrogen Oxide Emissions [326 IAC 10-3-1 (d), and (e)][326 IAC 10-3-2][326 IAC 10-3-3(c)]

Pursuant to 326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories), beginning on May 31, 2004, the requirements of paragraphs (a) through (d) shall apply to each of the affected boilers, Boiler No.9, during the ozone control period of each year.

- (a) The Permittee shall limit nitrogen oxide (NO_x) emissions to seventeen-hundredths pound of NO_x per million British thermal units (0.17 lb/MMBtu) of heat input averaged over the ozone control period.
- (b) The Permittee shall ensure that greater than fifty percent (50%) of the heat input shall be derived from blast furnace gas averaged over an ozone control period.
- (c) During periods of blast furnace reline, startup, and period of malfunction, the affected boilers shall not be required to meet the requirement to derive fifty percent (50%) of the heat input from blast furnace gas.
- (d) If one or more of the affected boilers are subject to 326 IAC 10-3 and a New Source Performance Standard (NSPS), a National Emission Standard for Hazardous Air Pollutants

(NESHAP), or an emission limit established under 326 IAC 2, the affected boilers shall comply with the limitations and requirements of the more stringent rule.

Pursuant to 326 IAC 10-3-2(10), the ozone control period is, for 2004, the period beginning on May 31 and ending on September 30, inclusive, and, for 2005 and each year thereafter, the period beginning May 1 of a year and ending on September 30 of the same year, inclusive.

D.1.8 Acid Rain Requirement [326 IAC 21][40CFR Part 72]

Pursuant to CP089-10842-00448 issued on February 2, 2000, Boiler No. 9 shall not, in any three calendar year period, sell to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MW-hrs actual electric output (on a gross basis). This renders the requirements of 326 IAC 21 and 40 CFR Part 72 (Acid Rain Requirements) not applicable.

D.1.9 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 this facility and any control devices.

Compliance Determination Requirements

D.1.10 Compliance and Performance Test Methods [40 CFR Part 60.46b]

Pursuant to 40 CFR Part 60.46b(e) (Compliance and Performance Test Methods and Procedures for Nitrogen Oxide), the boiler is subject to the following requirements:

- (a) The Permittee to determine compliance with the emission limits for nitrogen oxides required under 40 CFR Part 60.44b, shall conduct the performance test as required under 40 CFR Part 60.8 using the continuous system for monitoring nitrogen oxides under 40 CFR Part 60.48(b);
- (b) The initial compliance test shall be monitored for 30 successive steam generating unit operating days pursuant to 40 CFR Part 60.46b(e)(1). The 30-day average emission rate shall be calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period to demonstrate compliance with the NO_x emission rate required by 40 CFR Part 60.44b(l); and
- (c) Following the date on which the initial performance test is completed, the Permittee shall determine compliance with the NO_x emission rate required by 40 CFR Part 60.44b(l) on a continuous basis through the use of a 30-day rolling average emission rate pursuant to 40 CFR Part 60.46b(e)(3). A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

D.1.11 Nitrogen Oxide Emissions Monitoring Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 10-3-3 and 10-3-4(c)]

- (a) Pursuant to 326 IAC 10-3-4, beginning May 31, 2004 and each ozone control period thereafter, compliance with the requirement in Condition D.1.7 that greater than fifty percent (50%) of the heat input is derived from blast furnace gas shall be demonstrated by monitoring fuel usage and percentage of heat input derived from each fuel combusted.
- (b) Pursuant to 326 IAC 10-3-3(d)(4), to demonstrate compliance with the NO_x emissions limit in Condition D.1.7 the Permittee shall determine baseline ozone control period emissions as described in the site specific compliance plan for Boiler No. 9, approved by IDEM on June 20, 2003.

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

D.1.12 Fuel Usage

In order to demonstrate compliance with D.1.4, D.1.5 and D.1.6, the source shall burn only blast furnace gas and natural gas in the No. 9 Boiler.

D.1.13 NOx Emission Monitoring [40 CFR 60.48b][326 IAC 3-5]

Pursuant to 40 CFR Part 60.48b (Emission Monitoring), the boiler is subject to the following requirements:

- (a) The Permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring NOx emissions discharged to the atmosphere and record the output of the system;
- (b) The CEM shall be operated and data recorded during all periods of operation of the boiler except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments;
- (c) The 1-hour average NOx emission rates measured by the continuous NOx monitor shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rate. The 1-hour averages shall be calculated using the data points required by 40 CFR Part 60.13(b). At least 4 data points must be used to calculate each 1-hour average;
- (d) The procedures under 40 CFR Part 60.13 shall be followed for installation, evaluation, and operation of the CEM.
- (e) When NOx emission data are not obtained because of CEM breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
- (f) Pursuant to 326 IAC 3-5-1(c)(2)(D), the percent O2 in the flue gas is required to convert NOx CEM data to units of the emission limitation for the particular facility.
- (g) For NOx and O2, the Permittee shall install, calibrate, certify, operate and maintain a continuous monitoring system for each steam generating unit in accordance with 326 IAC 3-5:
 - (1) The CEM shall measure NOx and O2 emissions rates in pounds per hour and parts per million (ppmvd). The use of CEMs to measure and record the NOx and O2 hourly limits, is sufficient to demonstrate compliance. The source shall maintain records of the parts per million and pounds per hour.
 - (2) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

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

D.1.14 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]

- (a) Pursuant to 40 CFR 63.7545, the Permittee shall submit the notifications in 40 CFR 63.9(b)(2) that apply to the affected sources for the large gaseous fuel subcategory and chosen compliance methods by the dates specified. These notifications include, but are not limited to, the following:
 - (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) not

later than 120 days after the effective date of 40 CFR 63, Subpart DDDDD as required by 40 CFR 63.7545(b).

- (2) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7545(d).
 - (3) If required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), a Notification of Compliance Status containing the information required by 40 CFR 63.9(h)(2)(ii) in accordance with 40 CFR 62.7545(e).
 - (A) For each initial compliance demonstration, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR 63.10(d)(2).
 - (B) The Notification of Compliance Status shall contain the items in 40 CFR 63.7545(e)(1) through (9), as applicable.
 - (4) If required to use a continuous monitoring system (CMS), notification of a performance evaluation, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
- (b) The notifications required by paragraph (a) shall be submitted to:

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

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

D.1.15 Recordkeeping Requirement [40 CFR Part 60.49b]

- (a) Pursuant to 40 CFR Part 60.49b, the boiler is subject to the following recordkeeping requirements:
 - (1) The Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor for each fuel for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
 - (2) The Permittee shall maintain records of the following information for each steam generating unit operating day:
 - (A) Calendar date;
 - (B) Average hourly NO_x emission rates (expressed as NO₂)(ng/J or lb/MMBtu heat input) measured or predicted.
 - (C) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly NO_x emission rates for the preceding 30 steam generating unit operating days.
 - (D) Identification of the steam generating unit operating days when the

calculated 30-day average NO_x emission rates are in excess of the NO_x emission standard under 40 CFR Part 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.

- (E) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - (F) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
 - (G) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - (H) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
 - (I) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
 - (J) Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR 60, Appendix F, Procedure 1.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Record Keeping Requirements

- (a) Pursuant to 326 IAC 10-3-5(a), to document compliance with Conditions D.1.7 and D.1.11, beginning on May 31, 2004 and each ozone control period thereafter, the Permittee shall maintain records required under permit conditions D.1.13(g)(1) and D.1.15(a)(1) along with the results of any performance testing. These records shall be complete and sufficient to establish compliance with the NO_x emission limits and heat input requirements established in Condition D.1.7.
- (1) The date, time, and duration of any startup, shutdown, or malfunction in the operation of the boilers or emissions monitoring equipment.
 - (2) The results of any performance testing.
 - (3) If a unit is equipped with a CEMS, identification of time periods:
 - (A) during which NO_x standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances; and
 - (B) for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - (4) All records required to be produced or maintained shall be retained on site for a period of five (5) years. The records shall be made available to IDEM, OAQ or the U.S. EPA upon request.

D.1.17 Reporting Requirements[326 IAC 10-3-5(e)]

Pursuant to 326 IAC 10-3-5(e), for the ozone control period of each year by October 31, beginning in 2004 and each year thereafter, the Permittee shall submit a report to IDEM, OAQ documenting

compliance with all applicable requirements of 326 IAC 10-3 in accordance with the site specific compliance plan detailed under 326 IAC 10-3-3(c). The report submitted by the Permittee requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.1.18 Reporting Requirement

A quarterly summary of the information to document compliance with Condition D.1.4 (a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit within thirty (30) days after the end of the quarter being reported.

D.1.19 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12] [326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit for the affected source for the large solid fuel subcategory.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart DDDDD, a description of the affected sources and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than nine months prior to the compliance date as specified in 40 CFR 63.7495(b).
- (c) The significant permit modification application shall be submitted to:

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

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

Insignificant Activities:

- (1) The following VOC and HAP storage containers:
 - (A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons. [326 IAC 8-9]
- (2) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-1-2]

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

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

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-9]

Pursuant to 326 IAC 8-9-1, the Permittee is required to keep records on the information in 326 IAC 8-9-6(a)-(b) for all storage vessels.

D.2.2 Particulate Matter (PM and PM₁₀) Emission Limitations [326 IAC 6-1-2]

- (a) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter emissions from the brazing equipment, cutting torches, soldering equipment, welding equipment shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

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

D.2.3 Record Keeping Requirements

Pursuant to 326 IAC 8-9, the Permittee must keep records of the following:

- (a) The vessel identification number;
- (b) The vessel dimensions; and
- (c) The vessel capacity.

Records shall be maintained for the life of the vessel.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Ironside Energy LLC, a contractor of ISG-Indiana Harbor Inc
Source Address: 3001 Dickey Road, East Chicago, IN 46312-1610
Mailing Address: Primary Energy Steel LLC, 2000 York Road, Suite 129, Oak Brook, IL 60523
Part 70 Permit No.: T089-11557-00448

**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:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- 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:

Phone:

Date:

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Ironside Energy LLC, a contractor of ISG-Indiana Harbor Inc
Source Address: 3001 Dickey Road, East Chicago, IN 46312-1610
Mailing Address: Primary Energy Steel LLC, 2000 York Road, Suite 129, Oak Brook, IL 60523
Part 70 Permit No.: T089-11557-00448

This form consists of 2 pages

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<p>9 This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); andC The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

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:
Describe the cause of the Emergency:

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

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Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
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:

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: Ironside Energy LLC, a contractor of ISG-Indiana Harbor Inc
Source Address: 3001 Dickey Road, East Chicago, IN 46312-1610
Mailing Address: Primary Energy Steel LLC, 2000 York Road, Suite 129, Oak Brook, IL 60523
Part 70 Permit No.: T089-11557-00448
Facility: Boiler No. 9
Parameter: Natural Gas Usage
Limit: 2080 MMCF per twelve (12) month total, rolled on a monthly basis

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	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:

Attach a signed certification to complete this report.

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

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

Source Name: Ironside Energy LLC, a contractor of ISG-Indiana Harbor Inc
 Source Address: 3001 Dickey Road, East Chicago, IN 46312-1610
 Mailing Address: Primary Energy Steel LLC, 2000 York Road, Suite 129, Oak Brook, IL 60523
 Part 70 Permit No.: T089-11557-00448

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	Ironside Energy, LLC, a contractor at ISG-Indiana Harbor, Inc
Source Location:	3001 Dickey Road, East Chicago, Indiana 46312-1610
County:	Lake
Operation Permit No.:	T089-11557-00448
SIC Code:	4911
Permit Reviewer:	Teresa Freeman

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Ironside Energy, LLC (Ironside), relating to the construction and operation of an industrial steam and electric power cogeneration plant.

Source Definition

ISG-Indiana Harbor Inc is a fully integrated steelmaking and finishing facility consists of a source with on-site contractors:

- (a) ISG-Indiana Harbor Inc, (089-00318) the primary operation, is located at, 3001 Dickey Road, East Chicago, Indiana 46312; and
- (b) Ironside Energy, LLC, (089-00448) the on-site contract operation (a cogeneration facility), is located at 3001 Dickey Road, East Chicago, Indiana.

IDEM has determined that ISG-Indiana Harbor Inc and Ironside Energy, LLC are under the common control of ISG-Indiana Harbor Inc. These two plants are considered one source due to contractual control. Therefore, the term "source" in the Part 70 documents refers to ISG-Indiana Harbor Inc and Ironside Energy, LLC as one source.

Separate Part 70 permits will be issued to ISG-Indiana Harbor Inc and Ironside Energy, LLC solely for administrative purposes. For permitting purposes, ISG-Indiana Harbor Inc is assigned Permit No. 089-7099-00318 and Ironside Energy, LLC is assigned Permit No. 089-11557-00448.

Permitted Emission Units and Pollution Control Equipment

Ironside Energy, LLC consists of the following permitted emission units and pollution control devices:

- (a) One industrial boiler, identified as Boiler No. 9, equipped with low-NOx burners, installed in 2001. The boiler has a nominal heat input rate of 657 MMBtu per hour and a continuous nominal steam production rate of 460,000 pounds of steam per hour. The primary fuel will be blast furnace gas (BFG) with natural gas as a backup/supplemental fuel;
- (b) One steam turbine electric generator with a nominal rate of 50 MW; and

- (c) One cooling tower.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

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

- (1) Space heaters, process heaters, or boilers using the following fuels:
 - (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (2) Combustion source flame safety purging on startup.
- (3) The following VOC and HAP storage containers:
 - (A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (4) Refractory storage not requiring air pollution control equipment.
- (5) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (6) Cleaners and solvents characterized as follows:
 - (A) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; 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; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (7) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (8) Closed loop heating and cooling systems.
- (9) Noncontact cooling tower systems with either of the following:
 - (A) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (10) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (11) Heat exchanger cleaning and repair.
- (12) Process vessel degreasing and cleaning to prepare for internal repairs.
- (13) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

- (14) 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.
- (15) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (16) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume.
- (17) Purge double block and bleed valves.
- (18) Filter or coalescer media changeout.

Existing Approvals

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

- (a) CP089-10842-00448 issued on February 2, 2000

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

- (a) CP089-10842-00448 issued on February 2, 2000

Condition: Pursuant to 7-2-1, the Permittee shall keep natural gas reports of calendar month average sulfur content, heat content, fuel consumption and sulfur dioxide emission rate in pounds per million Btu, and submit such records upon request of the OAQ.

Reason not incorporated: PTE of Sulfur Dioxide in original permit/TSD was 1.7 tpy, not greater than 25 tpy, which was applied. Therefore, 7-1, 7-2-1 and 7-4-1.1 do not apply.

- (b) CP089-10842-00448 issued on February 2, 2000

Condition: The proposed gaseous fuel-fired boiler is subject to the requirements of 40 CFR 60.44b(a) (Nitrogen Oxide Standards) because it combusts natural gas. Pursuant to this standard, the proposed boiler shall not cause to be discharged into the atmosphere any gases that contain NO_x in excess of 0.10 pounds per MMBtu.

Reason not incorporated: Source requested change of applicability based on BFG and natural gas being combusted in the boiler. Instead 40 CFR Part 60.44b(l) is the correct rule and the new condition is as follows:

Pursuant to 40 CFR Part 60.44b(l) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR Part 60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following limits:

- (1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/Jl (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or
- (2) If the affected facility has a low heat release rate and combusts natural gas or

distillate oil in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = [(0.10 * H_{go}) + (0.20 * H_r)] / (H_{go} + H_r)$$

Where:

E_n is the NOX emission limit, (lb/million Btu),
 H_{go} is the heat input from combustion of natural gas or distillate oil, and
 H_r is the heat input from combustion of any other fuel.

Enforcement Issue

There are no enforcement actions pending.

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 2, 2002.

There was no notice of completeness letter mailed to the source.

Potential To Emit –ISG- Indiana Harbor, Inc and Ironside Energy, LLC

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

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	greater than 100
SO ₂	greater than 100
VOC	greater than 100
CO	greater than 100
NO _x	greater than 100

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

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀, SO₂, CO and NO_x are equal to or greater than 100 tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-

1(29)) 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.

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

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls at Ironside only. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

Process/facility	Potential to Emit (tons/year)					
	PM	PM-10	SO ₂	VOC	CO	NO _x
Boiler with limited NG usage	7.9	7.9	0.6	5.7	59.4	56.3
Cooling Tower	3.4	3.4	---	---	---	---
Total Emissions	11.3	11.3	0.6	5.7	59.4	56.3

Note: PTE calculated on natural gas use only and does not include blast furnace gas usage

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Moderate nonattainment*
SO ₂	Marginal Nonattainment
NO ₂	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment or unclassifiable

*Lake County has been federally redesignated in 40 CFR 81.315 as attainment for PM10. The Air Pollution Control Board will be making the same redesignation in state rules.

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Lake County has been classified as nonattainment for PM10 (see table above) and SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (c) Lake County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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

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

326 IAC 12 and 40 CFR Part 60 Subpart D (NSPS for Fossil-Fuel-Fired Steam Generators)

The industrial steam and electric power cogeneration plant is not subject to 40 CFR Part 60 Subpart D (NSPS for Fossil-Fuel-Fired Steam Generators) because pursuant to 40 CFR Part 60.41b(j) any facility meeting the applicability requirements under 40 CFR Part 60.40b(a) and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to Subpart D (40 CFR Part 60.40).

326 IAC 12 and 40 CFR Part 60 Subpart Da (NSPS for Electric Utility Steam Generating Units)

The industrial steam and electric power cogeneration plant is not subject to the New Source Performance Standard (NSPS) for Electric Utility Steam Generating Units (40 CFR Part 60 Subpart Da) because the boiler is not defined as an electric utility steam generating unit in 40 CFR Part 60.41a. An electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

According to source information, the industrial steam and electric power co-generation plant only produces and supplies steam and electricity to ISG-Indiana Harbor Inc. An operation condition has been included in the construction permit to ensure that this rule does not apply.

326 IAC 12 and 40 CFR Part 60 Subpart Db (NSPS for Industrial Steam Generating Units)

The industrial steam and electric power cogeneration plant is subject to the New Source Performance Standard (NSPS) for Industrial Steam Generating Units (40 CFR Part 60 Subpart Db) because the unit was constructed after June 19, 1984 and has a heat input capacity greater than 29 MW (100 MMBtu per hour) and is fired by natural gas and blast furnace gas.

- (a) The gaseous fuel-fired boiler is not subject to the requirements of 40 CFR Part 60.42b (Sulfur Dioxide Standards) because these standards only apply to units that combust coal or oil.
- (b) The gaseous fuel-fired boiler is not subject to the requirements of 40 CFR Part 60.43b (Particulate Matter Standards) because these standards only apply to units that combust coal, oil, wood, and municipal-type solid waste.
- (c) Pursuant to 40 CFR Part 60.44b(l) On and after the date on which the initial performance

test is completed or is required to be completed under 40 CFR Part 60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following limits:

- (1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/JI (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or
- (2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = [(0.10 * H_{go}) + (0.20 * H_r)] / (H_{go} + H_r)$$

Where:

E_n is the NO_x emission limit, (lb/million Btu),
 H_{go} is the heat input from combustion of natural gas or distillate oil, and
 H_r is the heat input from combustion of any other fuel.

- (d) Pursuant to 40 CFR Part 60.46b(e) (Compliance and Performance Test Methods and Procedures for Nitrogen Oxide), the boiler is subject to the following requirements:
 - (1) The Permittee to determine compliance with the emission limits for nitrogen oxides required under 40 CFR Part 60.44b, shall conduct the performance test as required under 40 CFR Part 60.8 using the continuous system for monitoring nitrogen oxides under 40 CFR Part 60.48(b);
 - (2) The initial compliance test shall be monitored for 30 successive steam generating unit operating days pursuant to 40 CFR Part 60.46b(e)(1). The 30-day average emission rate shall be calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period to demonstrate compliance with the NO_x emission rate required by 40 CFR Part 60.44b(l); and
 - (3) Following the date on which the initial performance test is completed, the Permittee shall determine compliance with the NO_x emission rate required by 40 CFR Part 60.44b(l) on a continuous basis through the use of a 30-day rolling average emission rate pursuant to 40 CFR Part 60.46b(e)(3). A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.
- (e) Pursuant to 40 CFR Part 60.48b (Emission Monitoring), the boiler is subject to the following requirements:
 - (1) The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring NO_x emissions discharged to the atmosphere and record the output of the system;
 - (2) The CEM shall be operated and data recorded during all periods of operation of the boiler except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments;

- (3) The 1-hour average NO_x emission rates measured by the continuous NO_x monitor shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rate. The 1-hour averages shall be calculated using the data points required by 40 CFR Part 60.13(b). At least 2 data points must be used to calculate each 1-hour average;
 - (4) The procedures under 40 CFR Part 60.13 shall be followed for installation, evaluation, and operation of the CEM.
 - (5) When NO_x emission data are not obtained because of CEM breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
- (f) Pursuant to 40 CFR Part 60.49b (Reporting and Recordkeeping Requirements), the boiler is subject to the following requirements:
- (1) The Permittee shall submit notification of the date of initial startup, as provided by 40 CFR Part 60.7. This notification shall include the design heat input capacity, identification of fuels to be combusted, and the anticipated annual capacity factor for each fuel fired. The Permittee shall also submit the performance test data from the initial performance test and the performance evaluation of the CEM using the applicable performance specifications in appendix B.
 - (2) The Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor for each fuel for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
 - (3) The Permittee shall maintain records of the following information for each steam-generating unit operating day and submit quarterly reports to be postmarked by the 30th day following the end of each calendar quarter:
 - (A) Calendar date;
 - (B) Average hourly NO_x emission rates (expressed as NO₂)(ng/J or lb/MMBtu heat input) measured or predicted.
 - (C) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly NO_x emission rates for the preceding 30 steam generating unit operating days.
 - (D) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emission standard under 40 CFR Part 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
 - (E) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - (F) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

- (G) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - (H) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
 - (I) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
 - (J) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
- (4) Because the boiler is subject to the NO_x standard of 40 CFR Part 60.44b and combusts natural gas with a nitrogen content of 0.3 weight percent or less, the Permittee shall submit excess emission reports for any calendar quarter during which there are excess emissions. If there are no excess emissions during the calendar quarter, the Permittee shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. Excess emissions are defined as any calculated 30-day rolling average NO_x emission rate.
 - (5) All records shall be maintained by the Permittee for a period of 2 years following the date of such record.

326 IAC 21 and 40 CFR Part 72 (Acid Rain Program)

The industrial steam and electric power cogeneration plant is not subject to the requirements of the Acid Rain Program because it does not meet the definition of an affected unit. Pursuant to 40 CFR Part 72.6(b)(4)(ii), a cogeneration facility which supplies equal to or less than one-third its potential electrical output capacity on an annual basis to any utility power distribution system for sale is not considered an affected unit subject to the requirements of this rule. However, if in any three calendar year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MW-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the Acid Rain Program.

The industrial steam and electric power cogeneration plant only produces and supplies steam and electricity to the ISG-Indiana Harbor Inc. An operation condition has been included in the construction permit that enforces that the steam and electricity generated shall only be utilized at the ISG-Indiana Harbor Inc.

40 CFR 63 (National Emissions Standards for Hazardous Air Pollutants)

There are presently no National Emissions Standards for Hazardous Air Pollutant (NESHAP) regulations for Industrial Steam Generating Units.

40 CFR 63.52(e) (Application Requirements for Section 112(j) of the Clean Air Act)

- (a) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are applicable to this source because the source is a major source of HAPs (i.e., the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source includes one or more units that belong to one or more source categories affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002.

- (1) This rule requires the source to:
 - (A) Submit a Part 1 MACT Application by May 15, 2002; and

- (B) Submit a Part 2 MACT Application for each affected source category in accordance with the appropriate Part 2 MACT Application deadline listed in Table 1 to 40 CFR 63, Subpart B for the affected source category.
- (2) The Permittee submitted a Part 1 MACT Application on May 15, 2002.
 - (3) Pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The MACT and the General Provisions of 40 CFR 63, Subpart A will become new applicable requirements, as defined by 326 IAC 2-7-1(6), that must be incorporated into the Part 70 permit. After IDEM, OAQ receives the initial notification, any of the following will occur:
 - (A) If three or more years remain on the Part 70 permit term at the time the MACT is promulgated, IDEM, OAQ will notify the source that IDEM, OAQ will reopen the permit to include the MACT requirements pursuant to 326 IAC 2-7-9; or
 - (B) If less than three years remain on the Part 70 permit term at the time the MACT is promulgated, the Permittee must include information regarding the MACT in the renewal application, including the information required in 326 IAC 2-7-4(c); or
 - (C) The Permittee may submit an application for a significant permit modification under 326 IAC 2-7-12 to incorporate the MACT requirements. The application may include information regarding which portions of the MACT are applicable to the emission units at the source and which compliance options will be followed.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration Requirements) and 326 IAC 2-3 (Emission Offset Requirements)

The following limits and conditions will maintain emissions below 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) level requirements:

- (a) Pursuant to CP 089-10842-00448 issued on February 2, 2000, the natural gas fuel usage of Boiler No. 9 shall not exceed 2080 MMBtu per twelve (12) month total, rolled on a monthly basis, the NOx emissions from natural gas combustion in Boiler No. 9 shall not exceed 56.3 tons per twelve (12) month total, rolled on monthly basis. This limitation renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
- (b) Pursuant to CP 089-10842-00448 issued on February 2, 2000, the existing Boiler No. 4 with a heat input rate of 260 MMBtu per hour, which was owned and operated by ISG-Indiana Harbor Inc (formerly LTV) shall be permanently removed from service upon commercial operation of Boiler No. 9 to render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (PSD) not applicable. The Boiler No. 4 was removed from service on January 31, 2001.

Note:

In the TSD for CP 089-10842-00448 issued on February 2, 2000, IDEM made the following

determinations regarding this source:

The source modification project permitted as CP 089-10842-00448, involved the construction of Boiler No. 9 to be owned and operated by Ironside Energy, LLC and the removal from service the existing Boiler No. 4 which was owned and operated by the former LTV Steel. The 260 MMBtu per hour Boiler No. 4 had the capability of combusting blast furnace gas, natural gas and No. 6 oil. The emission credits from the shutdown of Boiler No. 4 were determined using the representative 2-year baseline period (1995-1996), prior to the modification. The average annual emissions of criteria pollutants were determined for this baseline period for natural gas only. Boiler No. 4 did not burn No. 6 oil during this period. A fixed quantity of BFG is produced at the Blast Furnaces at this plant. The BFG was not included as an emission credit because the redistribution of BFG from the existing Boiler No. 4 or flare will offset any increases at the proposed Boiler No. 9.

A federally enforceable natural gas fuel limit of 2080 MMCF per year shall be required on the proposed boiler to avoid PSD (326 IAC 2-2) and emission offset (326 IAC 2-3) requirements. The Boiler No. 9 is not restricted for amount of blast furnace gas (BFG) usage because the BFG is already generated by existing Blast Furnaces.

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 ten (10) tons per year in Lake County of PM10, PM, VOC, CO and NOx. 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 April 15 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 3-5 (Continuous Monitoring of Emissions)

The industrial steam and electric power cogeneration plant is subject to 326 IAC 3-5 (Continuous Monitoring of Emissions) because the unit is a fossil fuel-fired steam generator with a heat input capacity greater than 100 MMBtu per hour as defined in 326 IAC 3-5-1(b)(2).

- (a) Pursuant to 326 IAC 3-5-1(c)(2)(A)(i), an opacity monitor is not required because only gaseous fuel is combusted. The fuels to be combusted in the Boiler No. 9 include natural gas and BFG.
- (b) Pursuant to 326 IAC 3-5-1(c)(2)(B), an SO₂ continuous emission monitor (CEM) is not required because the boiler is not equipped with an SO₂ control and 40 CFR Part 60 Subpart Db does not require a SO₂ monitor because only gaseous fuel (natural gas and BFG) is combusted.
- (c) Pursuant to 326 IAC 3-5-1(c)(2)(C), a NO_x CEM is required because the boiler is equipped with low-NO_x burners. The NO_x CEM shall determine compliance with 326 IAC 12 and 40 CFR Part 60, Subpart Db.
- (d) Pursuant to 326 IAC 3-5-1(c)(2)(D), the percent O₂ in the flue gas is required to convert NO_x CEM data to units of the emission limitation for the particular facility.
- (e) For NO_x and O₂, the Permittee shall install, calibrate, certify, operate and maintain a continuous monitoring system for each steam generating unit in accordance with 326 IAC 3-5:
 - (1) The CEM shall measure NO_x and O₂ emissions rates in pounds per hour and parts per million (ppmvd). The use of CEMs to measure and record the NO_x and O₂ hourly limits is sufficient to demonstrate compliance. The source shall maintain records of the parts per million and pounds per hour.
 - (2) The Permittee shall submit to OAQ, within 90 days after monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in

accordance with the requirements of 326 IAC 3-5-4.

- (3) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7. The source shall also be required to maintain records of the amount of natural gas combusted per boiler on a monthly basis and the heat input capacity.

326 IAC 5-1 (Opacity Limitations)

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

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 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.

326 IAC 6-1 (Nonattainment Area Particulate Limitations)

The industrial steam and electric power cogeneration plant is subject to 326 IAC 6-1 (Nonattainment Area Particulate Limitations) because the existing source (ISG-Indiana Harbor Inc) is located in Lake County, a nonattainment area for particulate matter as listed in 326 IAC 6-1-7, and has the potential to emit 100 tons or more of particulate matter per year.

- (a) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter emissions from the Boiler No.9 when burning blast furnace gas shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
- (b) Pursuant to CP 089-10842-00448 issued on February 2, 2000, the gaseous fuel-fired boiler is subject to the "fuel combustion steam generator" category requirements (326 IAC 6-1-2(b)(5)) which limits the particulate matter emissions from fossil fuel combustion (this does not include blast furnace gas) to no more than 0.01 grains per dry standard cubic foot (dscf).
- (c) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter emissions from the brazing equipment, cutting torches, soldering equipment, welding equipment shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).

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

The industrial steam and electric power cogeneration plant is not subject to the requirements of 326 IAC 6-2 because The source is subject to the requirements of 326 IAC 6-1 (Nonattainment Particulate Emission Limitations). Pursuant to the applicability requirements (326 IAC 6-2-1(d) and (e)), if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6-1 (Nonattainment Particulate Emission Limitations) or 326 IAC 12 (New Source Performance Standards), then the limitations contained in 326 IAC 6-1 or 326 IAC 12 prevail.

326 IAC 6-3 (Particulate Emissions Limitations for Process Operations)

The industrial steam and electric power cogeneration plant is not subject to the requirements of 326 IAC 6-3 because The source is subject to the requirements of 326 IAC 6-1 (Nonattainment Particulate Emission Limitations). Pursuant to the applicability requirements (326 IAC 6-3-1(b)), if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6-1 (Nonattainment Particulate Emission Limitations) or 326 IAC 12 (New Source Performance Standards), then the limitations contained in 326 IAC 6-1 or 326 IAC 12 prevail.

326 IAC 6-4 (Fugitive Dust Emission Limitations)

The industrial steam and electric power cogeneration plant is subject to the requirements of 326 IAC 6-4 because this rule applies to all sources of fugitive dust. Pursuant to the applicability requirements (326 IAC 6-2-1(d) and (e)), "fugitive dust" means the generation of particulate matter to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located. The source shall be considered in violation of this rule if any of the criteria presented in 326 IAC 6-4-2 are violated.

326 IAC 6-5 (Fugitive Particulate Matter Emissions Limitations)

Pursuant to CP 089-10842-00448 issued on February 2, 2000, the industrial steam and electric power cogeneration plant is subject to the requirements of 326 IAC 6-5 because the new plant must obtain a permit pursuant to 326 IAC 2. However, the OAQ shall exempt the source from the fugitive control plan pursuant to 326 IAC 6-5-3(b) because The source will not have material delivery or handling systems that would generate fugitive emissions and all the roads and parking areas are be paved.

326 IAC 7-1 (Sulfur Dioxide Emission Limitations)

The industrial steam and electric power cogeneration plant is not subject to the requirements of 326 IAC 7-1 because the SO₂ potential to emit is less than 25 tons per year. Therefore, there are no 7-2 and 7-4 requirements applicable to this facility.

326 IAC 8 (Volatile Organic Compound Requirements)

Ironside Energy, LLC is not subject to any state 326 IAC 8, VOC requirements because there is not a source specific RACT for the operation and the VOC potential to emit does not exceed the 326 IAC 8-1-6 (BACT) applicability requirements of 25 tons per year.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This source is located in Lake County; therefore, the volatile organic liquid storage vessels of this permit are subject to 326 IAC 8-9. Since these storage tanks have the capacities less than 39,000 gallons, these tanks are subject to the reporting and record keeping provisions of 326 IAC 8-9-6(a) and (b), which have the following requirements:

- (a) The owner or operator of each vessel shall maintain records for the life of the vessel for the following information:
 - (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
- (b) The owner or operator of a stationary vessel shall keep all records as described for the life of the vessel.

326 IAC 9 (Carbon Monoxide Emission Limitations)

Ironside Energy, LLC is subject to 326 IAC 9 (Carbon Monoxide Emission Limitations) because it is a stationary source, which emits CO emissions and commenced operation after March 21, 1972. However, there is no specific emission limitations required by this rule because the source is not an operation listed in 326 IAC 9-1-2.

326 IAC 10 (Nitrogen Oxide Emission Limitations)

Ironside Energy, LLC is not subject to the requirements of 326 IAC 10 (Nitrogen Oxide Emission Limitations) because the source is not located in Clark County or Floyd County.

326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)

Pursuant to 326 IAC 10-3-1(a)(2) and (a)(3), the affected boilers, Boiler No. 9 is subject to 326 IAC 10-3, Nitrogen Oxide Reduction Program for Specific Source Categories. Pursuant to 326 IAC 10-3-3(c), the Permittee shall:

- (a) Limit NO_x emissions from the affected boilers to seventeen-hundredths pound of NO_x per million British thermal units (0.17 lb/MMBtu) of heat input averaged over an ozone control period; and
- (b) Ensure that greater than fifty percent (50%) of the heat input shall be derived from blast furnace gas averaged over an ozone control period.
- (c) Pursuant to 326 IAC 10-3-1(b), since Boiler No. 9 is subject to 326 IAC 10-3 and 40 CFR Part 60.44b(l), the affected boilers shall comply with the limitations and requirements of the more stringent rule.

Pursuant to 326 IAC 10-3-3(d)(2) and 326 IAC 10-3-4, the Permittee shall determine the baseline ozone control period emissions by using the site specific emission factor developed from representative emissions testing to demonstrate that the NO_x emissions do not exceed the emission limit of 0.17 lb/MMBtu and shall monitor fuel usage and percentage of heat input derived from each fuel combusted to demonstrate that greater than fifty percent (50%) of the heat input is derived from blast furnace gas. IDEM, OAQ will determine if the boilers can comply with 326 IAC 10-3 upon review of the site-specific compliance plan. IDEM approved the site-specific compliance plan on June 20, 2003.

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, OAQ, 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 Section D of the permit 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 Section D of the permit. 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 may be found in the federal applicability section of this TSD, pursuant to 326 IAC 12 and 40 CFR Part 60, Subpart Db.

Conclusion

The operation of this industrial steam and electric power cogeneration plant shall be subject to the conditions of the attached proposed Part 70 Permit No. T089-11557-00448.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Ironside Energy, LLC, a contractor at ISG-Indiana Harbor, Inc
Source Location: 3001 Dickey Road, East Chicago, Indiana 46312-1610
County: Lake
Operation Permit No.: T089-11557-00448
SIC Code: 4911
Permit Reviewer: Teresa Freeman

On November 20, 2003, the Office of Air Quality (OAQ) had a notice published in The Post Tribune in Merrillville, Indiana and The Times in Munster, Indiana, stating that Ironside Energy, LLC had applied for a Part 70 Operating Permit to operate a stationary integrated steel mill and finishing facility. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of sixty (60) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ 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. Miscellaneous grammar and spelling corrections have been made throughout the permit also.

Change 1:

On December 31, 2003, IDEM adopted a revision to 326 IAC 1-4-1 redesignating Lake County as attainment for PM₁₀. Additionally, on April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) named 23 Indiana counties and one partial county nonattainment for the new 8-hour ozone standard. The designations became effective on June 15, 2004. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, Condition A.1 is revised as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

Source Location Status: Nonattainment for ~~PM₄₀*~~, SO₂, **1-hour ozone** and **8-hour ozone standard**
Source Status: Part 70 Permit Program
Major Source, under PSD ~~and~~ Emission Offset Rules **and Nonattainment NSR**;
Major Source, Section 112 of the Clean Air Act
1 of 28 Source Categories under PSD and Emission Offset Rules

~~*Lake County has been federally redesignated in 40 CFR 81.315 as attainment for PM₁₀. The Air Pollution Control Board will be making the same redesignation in state rules.~~

Change 2:

The title of condition B.21, Inspection and Entry, has been revised to include an additional rule cite as follows:

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1][**IC 13-17-3-2**]

Change 3:

IDEM has revised the condition C.7 in order to clarify what parts of the regulation are not federally enforceable as follows:

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

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. The provisions of **326 IAC 1-7-1(3)**, 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

Change 4:

In condition C.9, the term "source" is replaced with "Permittee" as follows:

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 any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the ~~source~~ **Permittee** submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Change 5:

In condition C.15 (previously C.16), the term "source" is replaced with "Permittee" as follows:

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the ~~source~~ **Permittee** must comply with the applicable requirements of 40 CFR 68.

Change 6:

Condition C.16 (previously C.17) - Compliance Response Plan - Preparation, Implementation, Records, and Reports has been modified to apply only to situations where the emissions unit will continue to operate for an extended time while the compliance monitoring parameter is out of range. It is intended to provide OAQ an opportunity to assess the situation and determine whether any additional actions are necessary to demonstrate compliance with applicable requirements. The

changes to condition C.16 are as follows:

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5]
[326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) to include such response steps taken.

The OMM Plan (or Parametric Monitoring and SSM Plan) shall be submitted within the time frames specified by the applicable 40 CFR 60/63 requirements.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
- (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, **and it will be ten (10) days or more until the unit or device will be shut down, the Permittee shall promptly notify** the IDEM, OAQ ~~shall be promptly notified~~ of the expected date of the shut down. **The notification shall also include** the status of the applicable compliance monitoring parameter with respect to normal, and the results of the **response** actions taken up to the time of notification.
- (4) Failure to take reasonable response steps shall be considered a deviation from the permit.

Change 7:

The following revisions were made to the Emission Statement condition C.18 (previously C.19) to incorporate the revisions to 326 IAC 2-6 that became effective March 27, 2004. The revised rule

was published in the April 1, 2004 Indiana Register. Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). This Part 70 source located in Lake County has the potential to emit above threshold emissions in 326 IAC 2-6-3(a)(1); therefore, the source is required to submit an emission statement by July 1st each year.

C.18 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 April 15 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:~~

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of ~~criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting)~~ **all pollutants listed in 326 IAC 2-6-4(a);**
- (2) Indicate estimated actual emissions of regulated pollutants (as defined by 326 IAC 2-7-1(32)) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

~~(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:~~

The statement must be submitted to:

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

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

~~(b)~~ **(eb)** 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, OAQ, on or before the date it is due.

~~(d) 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, OAQ, on or before the date it is due.~~

Change 8:

In condition C.20, the term "source" is replaced with "Permittee" as follows:

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The ~~source~~ **Permittee** shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of

each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Change 9:

In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May, 18 2004, all permits must address the use of credible evidence; otherwise, USEPA will object to the permits. The following language has been incorporated into the permit to address credible evidence:

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314]

Notwithstanding the conditions of this permit that state specific methods that may be used to demonstrate compliance with, or a violation of, applicable requirements, any person (including the Permittee) may also use other credible evidence to demonstrate compliance with, or a violation of, any term or condition of this permit.

Change 10:

Since all applicable National Emission Standards for Hazardous Air Pollutants (NESHAPs) for this source have been promulgated, condition C.22 has been removed as follows:

Part 2 MACT Application Submittal Requirement

~~C.22 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e)] [40 CFR 63.56(a)] [40 CFR 63.9(b)] [326 IAC 2-7-12]~~

- ~~(a) The Permittee shall submit a Part 2 MACT Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).~~
- ~~(b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:~~
- ~~(1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;~~
 - ~~(2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or~~
 - ~~(3) The MACT standard or standards for the affected source categories included at the source are promulgated.~~
- ~~(c) Notwithstanding paragraph (a), pursuant to 40 CFR 63.56(a), the Permittee shall comply with an applicable promulgated MACT standard in accordance with the schedule provided in the MACT standard if the MACT standard is promulgated prior to the Part 2 MACT Application deadline or prior to the issuance of permit with a case-by-case Section 112(j) MACT determination. The MACT requirements include the applicable General Provisions requirements of 40 CFR 63, Subpart A. Pursuant to 40 CFR 63.9(b), the Permittee shall submit an initial notification not later than 120 days after the effective date of the MACT, unless the MACT specifies otherwise. The initial notification shall be submitted to:~~

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

and

~~United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590~~

Change 11:

Boiler No. 9 is subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. Boiler No. 9 comprises one existing affected source for the large gaseous fuel subcategory as defined by 40 CFR 63.7506(b), because it meets the criteria in the definition in 40 CFR 63.7575 for the large gaseous fuel subcategory. Since the emissions limitations and standards, operational requirements, monitoring requirements, record keeping requirements, and reporting requirements of the NESHAP have not yet been included in the Part 70 permit, all of the applicable requirements are not specifically identified in the Part 70 permit. Therefore, the permit shield cannot be granted for the NESHAP requirements, except for those notification requirements that are specified. When the owner or operator submits the significant permit modification application with the specific compliance options identified, IDEM, OAQ will incorporate all of the applicable requirements and the permit shield will be granted for the NESHAP requirements. The following conditions have been added to D.1 and conditions renumbered accordingly:

D.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

- (a) **The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected source, as designated by 40 CFR 63.7506(b). The Permittee must comply with these requirements on and after the effective date of 40 CFR 63, Subpart DDDDD.**
- (b) **Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition. The permit shield applies to Condition D.1.14, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD-Notification Requirements.**

D.1.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63, Subpart DDDDD]

- (a) **The affected source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, (40 CFR 63, Subpart DDDDD), as of the effective date of 40 CFR 63, Subpart DDDDD. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart DDDDD on and after three years after the effective date of 40 CFR 63, Subpart DDDDD.**
- (b) **Since the applicable requirements associated with the compliance options are not included and specifically identified in this permit, the permit shield authorized by the B section of this permit in the condition titled Permit Shield, and set out in 326 IAC 2-7-15 does not apply to paragraph (a) of this condition.**
- (c) **The following emissions unit comprises the affected source for the large gaseous fuel subcategory: Boiler No. 9.**
- (d) **The definitions of 40 CFR 63, Subpart DDDDD at 40 CFR 63.7575 are applicable to the affected source.**

D.1.14 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters - Notification Requirements [40 CFR 63, Subpart DDDDD]

- (a) Pursuant to 40 CFR 63.7545, the Permittee shall submit the notifications in 40 CFR 63.9(b)(2) that apply to the affected sources for the large gaseous fuel subcategory and chosen compliance methods by the dates specified. These notifications include, but are not limited to, the following:
- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) not later than 120 days after the effective date of 40 CFR 63, Subpart DDDDD as required by 40 CFR 63.7545(b).
 - (2) If required to conduct a performance test, a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required by 40 CFR 63.7(b)(1) and 40 CFR 63.7545(d).
 - (3) If required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), a Notification of Compliance Status containing the information required by 40 CFR 63.9(h)(2)(ii) in accordance with 40 CFR 62.7545(e).
 - (A) For each initial compliance demonstration, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR 63.10(d)(2).
 - (B) The Notification of Compliance Status shall contain the items in 40 CFR 63.7545(e)(1) through (9), as applicable.
 - (4) If required to use a continuous monitoring system (CMS), notification of a performance evaluation, if required, as specified in 40 CFR 63.9(g), by the date of submission of the notification of intent to conduct a performance test.
- (b) The notifications required by paragraph (a) shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

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

D.1.19 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12] [326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen in the Part 70 permit for the affected source for the large solid fuel subcategory.

- (a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Part 70 permit the applicable requirements of 40 CFR 63, Subpart DDDDD, a description of the affected sources and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.
- (b) The significant permit modification application shall be submitted no later than nine

months prior to the compliance date as specified in 40 CFR 63.7495(b).

(c) The significant permit modification application shall be submitted to:

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

On January 21, 2004, Primary Energy, LLC submitted comments on the proposed Part 70 permit. The comments and IDEM responses (with language added shown in bold and language in strikethrough) are as follows:

Comment 1:

Section A.1

In accordance with the letter sent to the IDEM Permits Branch on November 4, 2003 regarding change in ownership and operation of the Ironside Energy LLC facility, the company official responsible for operation of the facility will be John Prunkl and the mailing address and phone number are as follows:

Primary Energy Steel, LLC
2000 York Road, Suite 129
Oak Brook, IL 60523
630-371-0505

Response 1:

Condition A.1 has been changed to reflect these changes as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates an industrial steam and electric power cogeneration plant.

Responsible Official:
Source Address:
Mailing Address:

~~Mr. V. Michael Alverson~~ **John Prunkl**
3001 Dickey Road, East Chicago, Indiana 46312-1610
~~8407 Virginia Street, Merrillville, Indiana 46410~~
**Primary Energy Steel LLC, 2000 York Road, Suite 129,
Oak Brook, IL 60523**

Comment 2:

Section B.23

In accordance with IDEM's determination that ISG- Indiana Harbor and Ironside Energy LLC are under the common control of ISG-Indiana Harbor and thus a single source, and further in accordance with 326 IAC 2-7-19 related to Part 70 Annual Fees, Ironside Energy LLC should not be required to pay a separate Annual Fee.

Response 2:

Recognizing that on-site contractors may find one Part 70 Permit encompassing the entire major source cumbersome to use, IDEM is issuing separate Part 70 Permits for the on-site contractors and the primary source for administrative purposes only. The permits are issued based on a logical division of operations, with the operations of the on-site contractors segregated from the operations of the primary source. Each Permittee receiving a Part 70 Permit is also responsible for payment of an Annual Fee. Therefore, when a source consists of a Primary Part 70 source and sub-contractors, IDEM has laid the responsibility of fee payment on the Primary Part 70 source, subject to the fee cap of the entire Part 70 source. However, 326 IAC 2-7-19 is an applicable requirement for all Part 70 operations and it is included in this permit. If the Primary Part 70 source fails to pay

it's annual fee, a separate fee will be billed to the on-site contractors. The following changes have been made to condition B.23:

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. **In the event that the source is a sub-contractor and is combined with a larger Part 70 source, the larger Part 70 source may pay the Permittees' annual fees as part of the larger source billing and subject to the fee cap of the larger source. If, however, the larger Part 70 source does not pay its annual Part 70 permit fee, IDEM, OAQ will assess a separate fee in accordance with 326 IAC 2-7-19(c) to be paid by the Permittee.** Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), 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 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

Comment 3:

Section C.12

We find no basis for provision C.12(c) in IDEM regulation and further note that it is inconsistent with EPA requirements regarding data availability related to CEM breakdown as required in D.1.11 (e) of this permit. We request that the requirement be eliminated.

Response 3:

The requirements for monitoring the Continuous Emission Monitoring Equipment (CEMS) are contained in D.1.11. Condition C.12 Maintenance of Continuous Emission Monitoring Equipment has been removed and the remaining conditions renumbered.

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

- ~~(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.~~
- ~~(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
- ~~(c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.~~
- ~~(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, (40 CFR Part 60.48b).~~

Comment 4:

Section D.1.3

As there is no annual capacity factor for coal, oil or natural gas for this facility, we believe that D.1.3(1) should be modified as follows:

- "(1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with

any other fuels: a limit of 86 ng/JI (0.20 lb/million BTU) heat input ~~unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; up to the point that natural gas exceeds 30% of the heat input on a 24 hour average basis, at which point the limits described in (2) apply.~~ or

- (2) ~~If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:~~

$$En = [(0.10 * Hgo) + (0.20 * Hr)] / (Hgo + Hr)$$

Where:

En is the NOX emission limit, (lb/million Btu),

Hgo is the heat input from combustion of natural gas ~~or distillate oil~~, and

Hr is the heat input from combustion of blast furnace gas ~~any other fuel.~~"

Response 4:

Additional language to (1) cannot be incorporated because the applicable rule does not specify this language and IDEM does not have authority to modify provisions of the New Source Performance Standard 40 CFR 60, Subpart Db. Condition D.1.3 (now D.1.5) has been revised as a result of this comment as follows:

D.1.5 Nitrogen Oxides (NO_x) Emission Limitations [326IAC 12][40 CFR Part 60.44]

Pursuant to 40 CFR Part 60.44b(l) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR Part 60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following limits:

- (1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/JI (0.20 lb/million Btu) heat input ~~unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or~~
- (2) If the affected facility has a low heat release rate and combusts natural gas ~~or distillate oil~~ in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$$En = [(0.10 * Hgo) + (0.20 * Hr)] / (Hgo + Hr)$$

Where:

En is the NOX emission limit, (lb/million Btu),

Hgo is the heat input from combustion of natural gas or distillate oil, and

Hr is the heat input from combustion of any other fuel. **(for Ironside at ISG this is Blast Furnace Gas)**

Comment 5:

Section D.1.4

Pursuant to 326 IAC 6-1-3, section (b) should be modified as follows:

"Pursuant to CP 089-10842-00448 issued on February 2, 2000, the gaseous fuel-fired boiler is subject to the "fuel combustion steam generator" category requirements (326 IAC 6-1-2(b)(5)) which limits the particulate matter emissions from fossil fuel combustion (this does not include blast

furnace gas) to no more than 0.01 grains per dry standard cubic feet (dscf) as measured using 40 CFR 60, Appendix A, Method 5."

Response 5:

Condition D.1.4 (now D.1.6) has been revised to correct errors of applicability in the original Construction Permit (CP 089-10842-0048) and draft permit. 326 IAC 6-1-2(b)(3) applies to gaseous fuel-fired combustion units and does not distinguish between blast furnace gas or natural gas. The following changes have been made:

D.1.6 Particulate Matter (PM and PM₁₀) Emission Limitations [326 IAC 6-1-2]

~~(a) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the particulate matter emissions from the Boiler No.9 when burning blast furnace gas shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).~~

~~(b) Pursuant to CP 089-10842-00448 issued on February 2, 2000~~ **326 IAC 6-1-2**, the gaseous fuel-fired boiler is subject to the "fuel combustion steam generator" category requirements (326 IAC 6-1-2(b)(~~53~~)) which limits the particulate matter emissions from **gaseous fuel-fired** combustion (~~this does not include blast furnace gas~~) to no more than 0.01 grains per dry standard cubic feet (dscf) **as measured using 40 CFR 60, Appendix A, Method 5.**

Additionally, language has been added to the Part 70 Permit cover, because a construction permit condition has been revised. The change is as follows:

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 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. **This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.**

Comment 6:

Section D.1.5

Pursuant to 326 IAC 10-3-1(e), section (c) should be modified as follows:

"(c) The requirements of 326 IAC 10-3 shall not apply to the affected boilers during startup and shutdown periods ~~and~~ periods of malfunction, and during periods of blast furnace reline."

Response 6:

The language has been changed in D.1.5 (now D.1.7) to the wording of the rule, which includes the requested changes as follows:

D.1.7 Nitrogen Oxide Emissions [326 IAC 10-3-1 (d), and (e)][326 IAC 10-3-2][326 IAC 10-3-3(c)]

Pursuant to 326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories), beginning on May 31, 2004, the requirements of paragraphs (a) through (d) shall apply to each of the affected boilers, Boiler No.9, during the ozone control period of each year.

(a) The Permittee shall limit nitrogen oxide (NO_x) emissions to seventeen-hundredths pound of NO_x per million British thermal units (0.17 lb/mmBtu) of heat input averaged over the ozone control period.

(b) The Permittee shall ensure that greater than fifty percent (50%) of the heat input shall be derived from blast furnace gas averaged over an ozone control period.

~~(c) The requirements of 326 IAC 10-3 shall not apply to the affected boilers during startup and shutdown periods and periods of malfunction.~~ **During periods of blast furnace reline,**

startup, and period of malfunction, the affected boilers shall not be required to meet the requirement to derive fifty percent (50%) of the heat input from blast furnace gas.

Comment 7:

Section D.1.9

We believe that the following section (b) should be modified as follows:

~~“Pursuant to 326 IAC 10-3-3(d)(2), to demonstrate compliance with the NO_x emissions limit in Condition D.1.5 the Permittee shall operate a certified Part 60 continuous emission monitor (CEM) to monitor NO_x emissions as fully described in the Boiler No.9 Compliance Plan approved by IDEM on June 20, 2003 and as required in D.1.11 of this permit. Permitted allowables will be used for data substitution during periods of data non-availability. ~~determine baseline ozone control period emissions using the site specific emission factor developed from representative emissions testing, pursuant to 40 CFR 60, Appendix A, Method 7, 7A, 7C, 7D, or 7E, based on a range of typical operating conditions. The Permittee must establish that these operating conditions are representative, subject to approval by IDEM, OAQ upon review of the site specific compliance plan. IDEM approved the site specific compliance plan on June 20, 2003.”~~~~

Response 7:

IDEM OAQ agrees to this change in Condition D.1.9 (now D.1.11) as follows:

D.1.11 Nitrogen Oxide Emissions Monitoring Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 10-3-3 and 10-3-4(c)]

-
- (a) Pursuant to 326 IAC 10-3-4, beginning May 31, 2004 and each ozone control period thereafter, compliance with the requirement in Condition D.1.57 that greater than fifty percent (50%) of the heat input is derived from blast furnace gas shall be demonstrated by monitoring fuel usage and percentage of heat input derived from each fuel combusted.
- (b) Pursuant to 326 IAC 10-3-3(d)(24), to demonstrate compliance with the NO_x emissions limit in Condition D.1.57 the Permittee shall determine baseline ozone control period emissions ~~using the site specific emission factor developed from representative emissions testing, pursuant to 40 CFR 60, Appendix A, Method 7, 7A, 7C, 7D, or 7E, based on a range of typical operating conditions. The Permittee must establish that these operating conditions are representative, subject to approval by IDEM, OAQ upon review of the site specific compliance plan.~~ **as described in the IDEM approved the site specific compliance plan for Boiler No. 9, approved by IDEM on June 20, 2003.**

Comment 8:

Section D.1.11

Section D.1.11(g)(3) requires record keeping of combusted fuel as does D.1.12(a)(1). As such, we believe that D.1.11(g)(3) should be modified as follows:

~~“The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7. The source shall also be required to maintain records of the amount of natural gas combusted per boiler on a monthly basis and the heat input capacity.”~~

Response 8:

IDEM agrees to this change in condition D.1.11 (now D.1.13) and is also removing the word “install” in D.1.13 (a) and removing D.1.13 (g)(2) because they have been completed. The changes are as follows:

D.1.13 NO_x Emission Monitoring [40 CFR 60.48b][326 IAC 3-5]

-
- (a) The Permittee shall ~~install~~, calibrate, maintain, and operate a continuous monitoring system

for measuring NOx emissions discharged to the atmosphere and record the output of the system;

- (g) For NOx and O2, the Permittee shall install, calibrate, certify, operate and maintain a continuous monitoring system for each steam generating unit in accordance with 326 IAC 3-5:
- (1) The CEM shall measure NOx and O2 emissions rates in pounds per hour and parts per million (ppmvd). The use of CEMs to measure and record the NOx and O2 hourly limits, is sufficient to demonstrate compliance. The source shall maintain records of the parts per million and pounds per hour.
 - ~~(2) The Permittee shall submit to OAQ, within 90 days after monitor installation, a complete written continuous monitoring standard operating procedure (SOP), in accordance with the requirements of 326 IAC 3-5-4.~~
 - ~~(3) The Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7. The source shall also be required to maintain records of the amount of natural gas combusted per boiler on a monthly basis and the heat input capacity.~~

Comment 9:

Section D.1.12

Several of the records listed as being required to be maintained and submitted on a quarterly basis are not applicable to this facility or are not normally required to be routinely submitted. In addition, reporting requirements are already specified in D.1.15. As such, we suggest the following revisions to D.1.12(a):

~~(2) "The Permittee shall maintain records of the following information for each steam generating unit operating day and submit quarterly reports to be postmarked by the 30th day following the end of each calendar quarter."~~

Response 9:

Condition D.1.15 (a)(2) (previously D.1.12) has been revised as follows:

D.1.15 Recordkeeping Requirement [40 CFR Part 60.49b]

- (a) Pursuant to 40 CFR Part 60.49b, the boiler is subject to the following recordkeeping requirements:
- (1) The Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor for each fuel for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
 - (2) The Permittee shall maintain records of the following information for each steam generating unit operating day ~~and submit quarterly reports to be postmarked by the 30th day following the end of each calendar quarter:~~

Comment 10:

Section D.1.13

326 IAC 10-3-5(a) Record keeping and reporting requirements apply to blast furnace gas-fired boilers with a heat input greater than 250 mmbtu that do not opt in to the NOx budget trading rule. However, as we are required to operate CEMs under D.1.11(a) and we are required under D.1.11(g)(1) to:

“measure NO_x and O₂ emissions rates in pounds per hour and parts per million (ppmvd). The use of CEMs to measure and record the NO_x and O₂ hourly limits is sufficient to demonstrate compliance. The source shall maintain records of the parts per million and pounds per hour”

Under D.12.1(a)(1) we are required to “record and maintain records of the amounts of each fuel combusted during each day”, and under D.1.12(a)(2)(B) and (C) we are required to maintain records of “average hourly NO_x emission rates in lb/mmBtu” and “the 30-day average NO_x emission rates in lb/mmBtu”. Therefore it is clearly not necessary to further require the maintenance of records currently listed as D.1.13(a)(1). As such, we believe that the section should be rewritten as follows:

“(a) Pursuant to 326 IAC 10-3-5(a), to document compliance with Conditions D.1.5 and D.1.9, beginning on May 31, 2004 and each ozone control period thereafter, the Permittee shall ~~create and~~ maintain records **required under permit conditions D.11.1(g)(1) and D.12.1(a)(1)** along with the results of any performance testing. ~~that include, but are not limited to, paragraphs (1) through (4) below. These R~~records maintained for (1) through (4) shall be complete and sufficient to establish compliance with the NO_x emission limits and heat input requirements established in Condition D.1.5.

~~(1) Daily records of the fuel usage, including percentages of different fuels combusted and heat input derived from each fuel, including the following:~~

~~(A) Type of fuel used;~~

~~(B) Quantity of fuel used;~~

~~(C) Fuel specific emission factor (lbs/million cubic feet (MMCF) gas or lbs/1,000 gal oil);~~

~~(D) Fuel specific heat content (mmBtu/1,000 gal for oil or MMBtu/MMCF for gas); and~~

~~(E) Emissions in lb/MMBtu.~~

(2) The date, time, and duration of any startup, shutdown, or malfunction in the operation of the boilers or emissions monitoring equipment.

(3) The results of any performance testing.

~~(4) All records required to be produced or maintained shall be retained on site for a period of five (5) years. The records shall be made available to IDEM, OAQ or the U.S. EPA upon request.”~~

Response 10:

IDEM has added 326 IAC 10-3-5(a)(2)(E) and agrees to make the following changes to D.1.13 (now D.1.16) as follows:

D.1.16 Record Keeping Requirements

(a) Pursuant to 326 IAC 10-3-5(a), to document compliance with Conditions D.1.5 ~~and D.1.9~~**11**, beginning on May 31, 2004 and each ozone control period thereafter, the Permittee shall ~~create and~~ maintain records **required under permit conditions D.1.13(g)(1) and D.15.1(a)(1) along with the results of any performance testing.** ~~that include, but are not limited to, paragraphs (1) through (4) below. These R~~records maintained for (1) through (4) shall be complete and sufficient to establish compliance with the NO_x emission limits and heat input requirements established in Condition D.1.5 ~~and 7~~.

~~(1) Daily records of the fuel usage, including percentages of different fuels combusted~~

and heat input derived from each fuel, including the following:

- (A) ~~Type of fuel used;~~
- (B) ~~Quantity of fuel used;~~
- (C) ~~Fuel specific emission factor (lbs/million cubic feet (MMCF) gas or lbs/1,000 gal oil);~~
- (D) ~~Fuel specific heat content (mmBtu/1,000 gal for oil or MMBtu/MMCF for gas); and~~
- (E) ~~Emissions in lb/MMBtu.~~

- (21) The date, time, and duration of any startup, shutdown, or malfunction in the operation of the boilers or emissions monitoring equipment.
- (32) The results of any performance testing.
- (3) **If a unit is equipped with a CEMS, identification of time periods:**
 - (A) **during which NO_x standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances; and**
 - (B) **for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.**
- (4) All records required to be produced or maintained shall be retained on site for a period of five (5) years. The records shall be made available to IDEM, OAQ or the U.S. EPA upon request.

Comment 11:

Section D.1.14

As described in D.1.9(b), Ironside Energy has already submitted and IDEM has approved a compliance plan that allows Ironside Energy to operate a certified Part 60 continuous emission monitor (CEM) in lieu of stack testing and the establishment of fuel specific emission factors. As such, this provision should be changed to require Ironside Energy to provide IDEM and U.S. EPA any updates needed to the compliance plan in accordance with 326 IAC 10-3-3(c).

Response 11:

Ironside Energy, LLC submitted a compliance plant to IDEM and the U.S. EPA and was approved on June 30, 2003 by IDEM. Therefore Condition D.1.14(a) (now D.1.17(a)) has been deleted and changed as follows:

D.1.17 Reporting Requirements [326 IAC 10-3-5(e)]

-
- (a) ~~Pursuant to 326 IAC 10-3-3(c), by May 1, 2003, the Permittee shall submit a site specific compliance plan for approval by IDEM, OAQ and U.S. EPA, including the following:~~
 - (1) ~~Baseline stack test data, or proposed testing, for establishment of fuel specific emission factors, or the emission factors for the type of boiler from the Compilation of Air Pollutant Emission Factors (AP-42), Fifth Edition, January 1995, Supplements A through G, December 2000 for each fuel to be combusted;~~
 - (2) ~~Anticipated fuel usage and combination of fuels; and~~

~~(3) If the Permittee proposes to demonstrate compliance by averaging the emission limit and fuel allocation among commonly owned units, a proposal for averaging the emission limit and fuel allocation among commonly owned units, including the proposed methodology for determining compliance.~~

~~The report submitted by the Permittee requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). In addition to being submitted to the address listed in Section C - General Reporting Requirements, the site specific compliance plan shall be submitted to:~~

~~United States Environmental Protection Agency, Region V
Air and Radiation Division
77 West Jackson Boulevard
Chicago, IL 60604-3590~~

(b) Pursuant to 326 IAC 10-3-5(e), for the ozone control period of each year by October 31, beginning in 2004 and each year thereafter, the Permittee shall submit a report to IDEM, OAQ documenting compliance with all applicable requirements of 326 IAC 10-3 in accordance with the site specific compliance plan detailed under 326 IAC 10-3-3(c). The report submitted by the Permittee requires the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Comment 12:

Semi-Annual Natural Gas Fired Boiler Certification

As the boiler is designed to burn a combination of blast furnace gas and natural gas and in accordance with D.1.5(b) that we are required to ensure that greater than 50% of the heat input shall be derived from blast furnace gas averaged over the ozone period, there is no basis or requirement for including or requiring the submittal of the Semi-Annual Natural Gas Fired Boiler Certification form.

Response 12:

IDEM agrees and the Semi-Annual Natural Gas Fired Boiler Certification has been deleted from the permit as follows:

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

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Ironside Energy LLC, a contractor of ISG Indiana Harbor Inc
Source Address: 3001 Dickey Road, East Chicago, IN 46312-1610
Mailing Address: 8407 Virginia Street, Merrillville, IN 46410
Part 70 Permit No.: T089-11557-00448

<u> </u> Natural Gas Only
<u> </u> Alternate Fuel burned
From: <u> </u> To: <u> </u>

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:
Phone:
Date:

~~A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.~~