



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: July 13, 2005
RE: ISG Indiana Harbor, Inc. / 089-20512-00318
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

July 13, 2005

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

Thomas W. Easterly
Commissioner

Mr. James Flannery
ISG Indiana Harbor, Inc.
300 Dickey Road
East Chicago, IN 46312-1610

Re: 089-20512
Minor Source Modification to:
Part 70 Permit No.: T089-7099-00318

Dear Mr. Flannery:

ISG Indiana Harbor, Inc. was issued Part 70 operating permit T089-7099-00318 on December 7, 2004 for a stationary integrated steel mill and finishing facility. An application to modify the source was received on December 20, 2004. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for modification at the source:

The existing NO₂ Galvanizing Line furnace has a heat input rate of 54 MMBtu/hr using sixty (60) "Phase 1" recuperative burners (27.26 MMBtu/hr) and 114 conventional burners (26.74 MMBtu/hr).

This project consists of the removal of the 114 existing conventional natural gas fired burners (26.74 MMBtu/hr) in the radiant tube section of the No. 2 Galvanizing Line in Section D.5 (e) (2) of the permit and replacement of these burners with sixty-two (62) new ultra-low NO_x recuperative (preheated combustion air) natural gas fired burners (22.39 MMBtu/hr total heat input). The 60 "Phase 1" recuperative burners will not be removed. The new total heat input for the NO₂ Galvanizing Line will now be 49.65 MMBtu/hr. The motive for the project is better fuel usage efficiency (lower heat input per ton of steel throughput).

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(I) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the permit modification has been issued. The source must comply with the requirements of 326 IAC 2-7-10.5(I)(2) and 326 IAC 2-7-12 before operation of any of the proposed emission units can begin.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, and ask for Walter Habeeb or extension (2 - 8422), or dial (317) 232-8422.

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

WVH

cc: File - Lake County
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector – Rick Massoels
Compliance Data Section
Administrative and Development



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**ISG-Indiana Harbor, Inc.
3001 Dickey Road
East Chicago, Indiana 46312**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR 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 70.6, IC 13-15 and IC 13-17.

Operating Permit No.: T089-7099- 00318	
Issued by: Original signed by Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: December 7, 2004 Expiration Date: December 7, 2009
First Minor Source Modification No.: T089-20512- 00318 Pages Affected: 13 and 68	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 13, 2005

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

ISG-Indiana Harbor Inc. consists of the following permitted emission units and pollution control devices:

- (e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:
 - (2) No. 2 Galvanizing Line (installed in 1988) consisting of:
 - (A) Flame Furnace having heat input rate of 150 MMBtu/hr with uncontrolled emissions exhausting through stack S5B.
 - (B) Galvanize furnace having a heat input rate of 49.65 MMBtu/hr from sixty (60) "Phase 1" recuperative burners with a total heat input rate of 27.26 MMBtu/hr and sixty-two (62) ultra-low NOx recuperative burners with a total heat input rate of 22.39 MMBtu/hr in the radiant tube section with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop.
 - (C) One (1) natural gas fired Edge Flame Burner on line No. 2, with uncontrolled emissions venting into the No. 2 Sheet Mill shop
 - (D) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (E) One (1) natural gas fired Selas Furnace, with uncontrolled emissions venting through vent (V5A) to No. 2 Sheet Mill shop
 - (F) Hot air dryers exhausting to No. 2 Sheet Mill shop
 - (G) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (H) Temper Mill
 - (3) Two (2) natural gas fired boilers designated as Boiler No. 7 and Boiler No. 8 (installed in 1955), having a combined heat input of 98 MMBtu per hour, with uncontrolled emissions exhausting to (S5C).
 - (4) Seven (7) space heaters (installed in 1968) having a combined heat input of 17.5 MMBtu per hour, with uncontrolled emissions exhausting to vent (V5B) to No. 2 Sheet Mill shop.

SECTION D.5

FACILITY OPERATION CONDITION

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

- (e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:
- (1) No. 1 Galvanizing Line (installed in 1959) consisting of:
 - (A) Flame Furnace having heat input rate of 18 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (B) Galvanize furnace having a heat input rate of 37 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (C) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (D) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (E) Hot air dryer exhausting to No. 2 Sheet Mill shop
 - (2) No. 2 Galvanizing Line (installed in 1988) consisting of:
 - (A) Flame Furnace having heat input rate of 150 MMBtu/hr with uncontrolled emissions exhausting through stack S5B.
 - (B) Galvanize furnace having a heat input rate of 49.65 MMBtu/hr from sixty (60) "Phase 1" recuperative burners with a total heat input rate of 27.26 MMBtu/hr and sixty-two (62) ultra-low NOx recuperative burners with a total heat input rate of 22.39 MMBtu/hr in the radiant tube section with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop.
 - (C) One (1) natural gas fired Edge Flame Burner on line No. 2, with uncontrolled emissions venting into the No. 2 Sheet Mill shop
 - (D) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (E) One (1) natural gas fired Selas Furnace, with uncontrolled emissions venting through vent (V5A) to No. 2 Sheet Mill shop
 - (F) Hot air dryers exhausting to No. 2 Sheet Mill shop
 - (G) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (H) Temper Mill
 - (3) Two (2) natural gas fired boilers designated as Boiler No. 7 and Boiler No. 8 (installed in 1955), having a combined heat input of 98 MMBtu per hour, with uncontrolled emissions exhausting to (S5C)
 - (4) Seven (7) space heaters (installed in 1968) having a combined heat input of 17.5 MMBtu per hour, with uncontrolled emissions exhausting to vent (V5B) to No. 2 Sheet Mill shop.

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

**Technical Support Document (TSD) for a Part 70 Minor Source
Modification and a Minor Permit Modification**

Source Background and Description

Source Name:	ISG Indiana Harbor Inc.
Source Location:	3001 Dickey Road, East Chicago 46312
County:	Lake
SIC Code:	3312
Operation Permit No.:	T 089-7099-00318
Operation Permit Issuance Date:	December 7, 2004
Minor Source Modification No.:	089-20512-00318
Minor Permit Modification No.	089-20921-00318
Permit Reviewer:	Walter Habeeb

The Office of Air Quality (OAQ) has reviewed a modification application from ISG Indiana Harbor, Inc. relating to the modification of the following emission units and pollution control devices:

The existing NO₂ Galvanizing Line furnace has a heat input rate of 54 MMBtu/hr using sixty (60) "Phase 1" recuperative burners (27.26 MMBtu/hr) and 114 conventional burners (26.74 MMBtu/hr).

This project consists of the removal of the 114 existing conventional natural gas fired burners (26.74 MMBtu/hr) in the radiant tube section of the No. 2 Galvanizing Line in Section D.5 (e) (2) of the permit and replacement of these burners with sixty-two (62) new ultra-low NO_x recuperative (preheated combustion air) natural gas fired burners (22.39 MMBtu/hr total heat input). The 60 "Phase 1" recuperative burners will not be removed. The new total heat input for the NO₂ Galvanizing Line will now be 49.65 MMBtu/hr. The motive for the project is better fuel usage efficiency (lower heat input per ton of steel throughput).

History

On December 7, 2004, ISG Indiana Harbor, Inc. was issued a Part 70 permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source and Minor Permit Modification 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 application for the purposes of this review was received on December 20, 2004.

Emission Calculations

See Appendix A (page 1 of 1) of this document for detailed emissions calculations.

Increase Emissions due to the Modification

This table reflects the increased emissions (before controls) due to this modification. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year) (future potential – past actual)
PM	0.70
PM-10	0.70
SO ₂	0.06
VOC	0.51
CO	7.80
NO _x	19.72
Individual HAP (Hexane)	0.168
ALL HAP's	0.175

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(4), a modification with a potential to emit greater than 5 tons per year or less than 25 tons per year of Nitrogen Oxides (NO_x).

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-2.5	Nonattainment
PM-10	Attainment
SO ₂	Nonattainment (primary)
NO ₂	Attainment
1 Hour Ozone	Nonattainment (severe)
8 Hour Ozone	Nonattainment (moderate)
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.
- 1) On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NO_x threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Lake County has been designed as nonattainment in Indiana for the 1-hour ozone standard. Therefore, VOC emissions were reviewed pursuant to

the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

- 2) VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designed as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset.
- (b) U.S. EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Lake County as nonattainment for PM 2.5. On March 7, 2005 the Indiana Attorney General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for Violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM 10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements.
- (c) Lake County has been classified as nonattainment for SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (d) Lake County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

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

Pollutant	Emissions (tons/year)
PM-10	1,287
PM-2.5	909
SO ₂	1,939
VOC	238
CO	14,560
NOx	1,866

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon ISG Indiana Harbor Inc. 2003 OAQ emission data.

Potential to Emit of Modification After Issuance

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

Process/ Facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	All HAPs
No. 2 Galvanizing Line							
Ultra-Low NOx Recuperative Burners	0.70	0.70	0.06	0.51	7.80	19.72	0.175

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD and the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-2 PSD and 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Entire Source

326 IAC 2-3 Emission Offset

Lake County has been designated as non-attainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM 2.5 Nonattainment Areas" authored by Stave Page, Director of OAQPS, until EPA promulgates the PM 2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM 2.5 emissions. IDEM will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM 2.5 NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit 100 tpy of any regulated pollutant. This modification at the #2 galvanizing line of ISG Indiana Harbor, Inc. has a limited potential to emit of PM 10 below 100 tpy. Therefore, assuming that PM10 emissions represent PM 2.5 emissions, 326 IAC 2-3 does not apply.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is one of the twenty eight (28) listed source categories, however, the potential to emit from the new ultra-low NOx recuperative burner system is below the PSD significance levels. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 will not apply.

326 IAC 8-1-6 (New facilities; General Reduction requirements)

This modification is not subject to the requirements of 326 IAC 8-1-6 (New facilities; General Reduction requirements) because the potential to emit VOC from this modification is less than 25 tons per year.

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

The operation of the new ultra-low NOx recuperative burners will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAP's. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the visible emissions shall meet the following:

- (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 60% opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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.

Permit Changes

The following changes will be made to the existing TV permit (bolded language as been added and language with a strikethrough as been omitted).

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

ISG-Indiana Harbor Inc. consists of the following permitted emission units and pollution control devices:

- (e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:
 - (2) No. 2 Galvanizing Line (installed in 1988) consisting of:
 - (A) Flame Furnace having heat input rate of 150 MMBtu/hr with uncontrolled emissions exhausting through stack S5B.
 - (B) Galvanize furnace having a heat input rate of 54 **49.65** MMBtu/hr **from sixty (60) "Phase 1" recuperative burners with a total heat input rate of 27.26 MMBtu/hr and sixty-two (62) ultra-low NOx recuperative burners with a total heat input rate of 22.39 MMBtu/hr in the radiant tube section** with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop.

SECTION D.5 FACILITY OPERATION CONDITION

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

- (e) One (1) Sheet Mill Finishing operation, designated as No. 2 Sheet Mill, having a maximum capacity of 1,404,929 tons per year, comprised of the following facilities, fugitive sources, process equipment, and operational practices:
- (1) No. 1 Galvanizing Line (installed in 1959) consisting of:
 - (A) Flame Furnace having heat input rate of 18 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (B) Galvanize furnace having a heat input rate of 37 MMBtu/hr with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop
 - (C) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (D) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (E) Hot air dryer exhausting to No. 2 Sheet Mill shop
 - (2) No. 2 Galvanizing Line (installed in 1988) consisting of:
 - (A) Flame Furnace having heat input rate of 150 MMBtu/hr with uncontrolled emissions exhausting through stack S5B.
 - (B) Galvanize furnace having a heat input rate of ~~54~~ **49.65** MMBtu/hr **from sixty (60) "Phase 1" recuperative burners with a total heat input rate of 27.26 MMBtu/hr and sixty-two (62) ultra-low NOx recuperative burners with a total heat input rate of 22.39 MMBtu/hr in the radiant tube section** with uncontrolled emissions exhausting through vent (V5A) to No. 2 Sheet Mill shop.
 - (C) One (1) natural gas fired Edge Flame Burner on line No. 2, with uncontrolled emissions venting into the No. 2 Sheet Mill shop
 - (D) Zinc coating pot with uncontrolled fugitive emissions exhausting into the No. 2 Sheet Mill shop
 - (E) One (1) natural gas fired Selas Furnace, with uncontrolled emissions venting through vent (V5A) to No. 2 Sheet Mill shop
 - (F) Hot air dryers exhausting to No. 2 Sheet Mill shop
 - (G) Chromic Acid Bath with water vapor exhausting into the No. 2 Sheet Mill shop
 - (H) Temper Mill
 - (3) Two (2) natural gas fired boilers designated as Boiler No. 7 and Boiler No. 8 (installed in 1955), having a combined heat input of 98 MMBtu per hour, with uncontrolled emissions exhausting to (S5C)
 - (4) Seven (7) space heaters (installed in 1968) having a combined heat input of 17.5 MBtu per hour, with uncontrolled emissions exhausting to vent (V5B) to No. 2 Sheet Mill shop.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 089-20512-00318 and Minor Permit Modification No. 089-20921-00318.

Appendix A

Company Name: ISG Indiana Harbor, Inc.
 Address City IN Zip: 3001 Dickey Road, East Chicago, Indiana 46312
 Permit No.: 089-20512
 Plt ID: No. 089- 00318
 Reviewer: Walter Habeeb
 Date: January 19, 2005

Emission Rates (TPY)			
Pollutant	Future Potential *	Past Actual **	Regulatory Increase ***
PM	1.60	0.90	0.70
PM10	1.60	0.90	0.70
SO2	0.13	0.07	0.06
NOx	36.87	17.15	19.72
CO	17.72	9.92	7.80
VOC	1.16	0.65	0.51
Lead	0.001	0.00006	0.00004
Individual HAP Hexane	0.380	0.212	0.168
Total HAPs	0.398	0.223	0.175

- * Future potential emissions are based on emissions factors from U.S. EPA's AP-42, Section 1.4 (natural gas combustion) and are an average rate in tons per year.
- ** Past Actual emissions based on natural gas consumption for 24 consecutive month period during calendar years 1998 -1999 and on emissions factors from U.S. EPA's AP-42, Section 1.4 (natural gas combustion).
- *** Future potential emissions minus past actual emissions.