



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

July 16, 2004

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

TO: Interested Parties / Applicant

RE: ISG Burns Harbor / 127-19106-00001

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

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July 16, 2004

Robert Maciel
ISG Burns Harbor
P. O. Box 248
Chesterton, Indiana 46304

Re: **127-19106-00001**
Permit Modification to CP127-2725-00001

Dear Mr. Maciel:

On January 28, 1994, ISG Burns Harbor was issued a construction permit (CP127-2725-00001) for the reconstruction and operation of the Coke Battery No. 2. This construction permit limited the annual coal charged to the coke battery such that the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and 326 IAC 2-3 Emission Offset did not apply.

On May 5, 2004, the Office of Air Quality (OAQ) received a permit modification request to revise the annual coal limitation for the Coke Battery No. 2. Based on the information submitted by ISG Burns Harbor and pursuant to IC13-15-7-1, Operation Condition No. 8 of construction permit 127-2725-00001 is hereby modified as follows:

8. (a) That the amount of coal processed through Coke Battery No. 2 shall not exceed 1,279,268.70 tons of dry coal per year, rolled monthly on a 12 month basis.
- (b) The Permittee shall determine and document the moisture content of coal charged through the Coke Battery No. 2 **by following these coal sampling and analysis procedures:**
 - (1) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be charged to the ovens may be obtained.
 - (2) The sample collected shall be analyzed in accordance with the methods specified in ASTM D 3173 using a moisture determination balance analyzer.
 - (3) Coal samples shall be collected for analysis at a minimum of once per day, five (5) times per 7-day week.



For days that no samples were collected, the moisture content to be used for determination shall be the average of the moisture content of the 5 most recent consecutive samples taken.

- (4) The daily dry tons calculated above will be summed each month for a monthly total.

The Permittee may submit documentation of procedures and results to IDEM OAQ for approval to modify or use other equivalent coal sampling and analysis procedure.

The Permittee shall make these records available to IDEM, OAQ and the US EPA upon request.

- (c) The Permittee shall determine and document the actual amount of dry coal charged through the Coke Battery No. 2.
- (d) The Permittee shall submit a quarterly report of the actual amount of dry coal charged through the Coke Battery No. 2, using the Quarterly Report of Dry Coal Charged, or its equivalent.

All other conditions of permit CP127-2725-00001, its amendments and modifications shall remain unchanged and in effect. This permit decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions regarding this permit modification please contact Ms. Iryn Calilung of my staff at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015 or by telephone at (317) 233-5692 or toll free at 1-800-451-6027 extension 3-5692 or at icalilun@dem.state.in.us.

Sincerely,

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

Attachment: Quarterly Report Form of Dry Coal charged
TSD of Permit Modification 127-19106-00001
TSD Addendum of Permit Modification 127-19106-00001

cc: File – Porter County
Porter County Health Department
Northwest Regional Office
Air Compliance Section Inspector – RGM
Compliance Data Section - KA
Technical Support and Modeling - MB
Part 70 Operating Permit File – T127-6301-00001
Part 70 Operating Permit Reviewer – MG

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

Technical Support Document (TSD)
Permit Modification to a Construction Permit

Source Background and Description
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Source Name:	ISG Burns Harbor
Source Location:	US Highway 12, Burns Harbor, IN 46304
Mailing Address:	P. O. Box 248, Chesterton, IN 46304
County:	Porter
SIC Code:	3312 (Steel Mill)
NAICS Code:	331211
Source Categories:	1 of 28 Listed Source Categories Major PSD Source Major source under Section 112 of the CAA
Permit Number:	127-19106-00001
Permit Writer:	Iryn Calilung 317/233-5692 icalilun@dem.state.in.us

Description of the Proposed Modification

On January 28, 1994, ISG Burns Harbor, under the name of Bethlehem Steel, was issued a permit (CP 127-2725-00001) for the reconstruction and operation of Coke Battery No. 2.

Operation Condition No. 8 of this permit limited the amount of coal processed through Coke Battery No. 2 to 1,371,870 tons per year. Below is the condition as currently written:

8. That the amount of coal processed through battery no. 2 shall not exceed 1,371,870 tons per year rolled monthly on a 12 month basis.

During the first 12 months of operation, coal charged shall be limited such that, the total coal charged divided by the months of operation shall not exceed 114,324 tons per month.

This annual coal limitation was specified such that the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and 326 IAC 2-3 Emission Offset did not apply.

The existing annual coal limitation was based on the average coal moisture of 6.75% for the year 1988 to 1989.

On May 5, 2004, ISG Burns Harbor submitted a permit modification application requesting to revise the amount of coal to be charged to the Coke Battery No. 2. This request is due to the significant increase in moisture of coal available for the mill industry. In order to correct the coal limitation, ISG Burns Harbor requested that the Operation Condition No. 8 of CP127-2725-00001 be clarified and modified to reflect an annual coal limitation based on its dry stage, rather than the "natural wet stage" and still maintain the same air emissions from the initial permitting. There is no new construction involved in this permit modification application.

Emissions Calculations

The table below summarizes the impact of the revision in terms of potential emissions:

Table 1 - - Coke Battery No. 2		
	Existing Coal Limitation	Proposed Coal Limitation
Permit No.	127-2725-00001 January 28, 1994	127-19106-00001 (pending)
Coal	1,371,870 tons/year with moisture (6.75%)	1,279,268.70 tons/year without moisture (0%)
First 12-month period	114,325 tons/month of wet coal	106,608 tons/month of dry coal
Emissions	Net emissions increase < PSD and Emission Offset	Maintain the same net emission increase < PSD and Emission Offset
Year	1988 to 1989	1988 to 1989

- (1) The existing wet coal limitation was based on the coal available and used in 1988 to 1989. This time frame was used in the initial permitting because these years represented the historical coal sulfur content.
- (2) The annual coal limitation was specified such that the requirements under 326 IAC 2-2 Prevention of Significant Deterioration (PSD) and 326 IAC 2-3 Emission Offset did not apply.
- (3) The proposed dry coal limitation is based on the wet coal limit minus the average moisture (6.75%) of the coal used in 1988 and 1989.
- (4) Methodology:

Coal Moisture = (1,371,870 tons of wet coal/year)*(6.75%/100)
 = 92601.22 tons/year

Dry coal = (1,371,870 tons of wet coal/year)-(92601.22 tons/year)
 = 127,9268.78 tons of dry coal/year

For the first 12-month:

Dry coal = (127,9268.78 tons of dry coal/year)/12 months
 = 106,605.73 tons/month
- (5) Since there is no impact on the net emissions increase made during the initial permitting, the request to revise the annual coal limitation is incorporated into the permit.

Federal and State Rules Applicability Determination

- (1) There are no changes on the existing applicable federal and state rules due to the proposed coal limitation
- (2) There are no new additional applicable federal and state rules that apply due to the proposed coal limitation.

County Attainment Status

ISG Burns Harbor is located in Porter County.

Table 2 - - Porter County	
Pollutant	Status
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Non Attainment
CO	Attainment
Lead	Attainment

- (1) Volatile organic compounds (VOC) and Ozone
 VOC are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (2) Criteria Pollutants
 Porter County has been classified as attainment or unclassifiable for all the other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Permit Modification

The existing permit CP127-2725-00001 is revised pursuant to IC13-15-7-1. Operation Condition No. 8 is revised as follows as a result of the change in annual coal limitation (new requirements are in **bold** fonts and deleted items are in ~~strikeout~~ fonts):

8. (a) That the amount of coal processed through **Coke** Battery No. 2 shall not exceed ~~1,371,870~~ **1,279,268.70** tons **of dry coal** per year, rolled monthly on a 12 month basis, **with compliance determined at the end of each month.**

 During the first 12 months of operation ~~the implementation of this new coal limitation,~~ coal charged shall be limited such that, the total coal charged divided by the months of operation shall not exceed ~~444,324~~ **106,608** tons **of dry coal** per month.
- (b) **The Permittee shall determine and document the moisture content of each batch of coal charged through the Coke Battery No. 2 and make these records available to IDEM, OAQ and the US EPA upon request.**
- (c) **The Permittee shall determine and document the actual amount of dry coal charged through the Coke Battery No. 2.**
- (d) **The Permittee shall submit a quarterly report of the actual amount of dry coal charged through the Coke Battery No. 2, using the Quarterly Report of Dry Coal Charged, or its equivalent.**

The quarterly report form is as follows:

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

QUARTERLY REPORT OF DRY COAL CHARGED

Source Name: ISG Burns Harbor
Source Location: US Highway 12, Burns Harbor, IN 46304
Mailing Address: P. O. Box 248, Chesterton, IN 46304
Emission Unit: Coke Battery No. 2
Limit: 1,279,268.70 tons of dry coal per year, rolled monthly on a 12 month basis, with compliance determined at the end of each month.
 106,608 tons of dry coal per month for the first 12-month period.

Reporting Year:	Quarter:
------------------------	-----------------

Month	Dry Coal Charged Through Coke Battery No. 2		
	This month (tons/month)	Previous 11 Months	12 Month Total (tons/year)

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

<p>A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.</p> <p>I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.</p>	
Signature:	Date:
Printed Name of the Responsible Official:	
Title/Position:	

Recommendation and Conclusion

- (1) 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 May 5, 2004.

- (2) Based on the facts, conditions and evaluations made, the OAQ staff recommends to the IDEM Commissioner that the findings for the Permit Modification 127-19106-00001 be provided to the public for comment.

IDEM Contact

Questions regarding this proposed approval can be directed to Iryn Calilung at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015 or by telephone at (317) 233-5692 or toll free at 1-800-451-6027 extension 3-5692 or at icalilun@dem.state.in.us.

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

Addendum to the Technical Support Document (TSD)
Permit Modification to a Construction Permit

Source Background and Description
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Source Name:	ISG Burns Harbor
Source Location:	US Highway 12, Burns Harbor, IN 46304
Mailing Address:	P. O. Box 248, Chesterton, IN 46304
County:	Porter
SIC Code:	3312 (Steel Mill)
NAICS Code:	331211
Source Categories:	1 of 28 Listed Source Categories Major PSD Source Major source under Section 112 of the CAA
Permit Number:	127-19106-00001
Permit Writer:	Iryn Calilung 317/233-5692 icalilun@dem.state.in.us

Public Notification and Participation
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On June 7, 2004 , the Office of Air Quality (OAQ) had a notice published in the Chesterton Tribune, Chesterton, IN, stating that ISG Burns Harbor had applied for an air permit modification to revise the amount of coal to be charged to the Coke Battery No. 2.

The public comment period ended on July 7, 2004.

Comments Received

On June 16, 2004, the Office of Air Quality (OAQ) received comments from Barnes & Thornburg, on behalf of ISG Burns Harbor. The summary of the comments with corresponding response are shown below:

Comment No. 1: Coal Limitation For The First 12-Month
ISG Burns Harbor requests that Condition 8(a) be modified to remove the more stringent standard that applies during the first 12 months after implementation of the new standard. This provision imposes a monthly limit during the first 12 months that is substantially more stringent than the 12-month rolling average. There is no basis for this monthly limit. The permit modification was only to allow the use of alternative, equivalent measuring techniques, and was not intended to seek a more stringent limit for the next 12 months. ISG has sufficient records to identify moisture content of the coal for the last several years and can create an accurate 12-month rolling average number for dry coal charged upon issuance of the permit modification.

OAQ Response: OAQ agrees and made the following change. The reporting form was revised accordingly.

Condition No. 8. (a) That the amount of coal processed through Coke Battery No. 2 shall not exceed 1,279,268.70 tons of dry coal per year, rolled monthly on a 12 month basis.

~~During the first 12 months of the implementation of this new coal limitation, the coal charged shall be limited such that the total coal charged divided by the months of operation shall not exceed 106,608 tons of dry coal per month.~~

Comment No. 2 :

Coal Moisture Content Determination

ISG requests that Condition 8(b) be modified to allow a more reasonable approach for determining the moisture content for the coal. It is not realistic to measure the moisture content of each batch of coal, and it is not necessary. ISG currently follows a procedure where:

- (a) samples of the blended coal are taken from the conveyor (serving 2 coke batteries) once a day five times a week,
- (b) a sample result is applied to the next day's average charge weight, as determined by the larry car scale weight, and
- (c) for any day when no coal sample was taken the previous day, the average moisture content of the previous 5 samples is used.

OAQ Response:

OAQ agrees with the request that the moisture coal sampling and analysis be clarified.

Condition 8(b)

The Permittee shall determine and document the moisture content of ~~each batch of~~ coal charged through the Coke Battery No. 2 **by following these coal sampling and analysis procedures:**

- (1) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be charged to the ovens may be obtained.**
- (2) The sample collected shall be analyzed in accordance with the methods specified in ASTM D 3173 using a moisture determination balance analyzer.**
- (3) Coal samples shall be collected for analysis at a minimum of once per day, five (5) times per 7-day week.**

For days that no samples were collected, the moisture content to be used for determination shall be the average of the moisture content of the 5 most recent consecutive samples taken.

- (4) The daily dry tons calculated above will be summed each month for a monthly total.**

The Permittee may submit documentation of procedures and results to IDEM OAQ for approval to modify or use other equivalent coal sampling and analysis procedure.

The Permittee and shall make these records available to IDEM, OAQ and the US EPA upon request.