INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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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: September 20, 2006

RE: Mid-Continent Coal & Coke Company / 127-23580-00108

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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 4-21.5-3-7 and IC 13-15-7-3 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 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-MOD.dot 03/23/06

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Carl Horst
Mid-Continent Coal and Coke Company
915 West 175th Street
Homewood, IL 60430-2058

September 20, 2006

Re: 127-23580-00108
Minor Source Modification to
Part 70 Permit 127-7634-00108

Dear Mr. Horst,

Mid-Continent Coal and Coke Company was issued a Part 70 operating permit on June 30, 2006 for three portable coke fines screening operations located at U. S. Highway 12, Burns Harbor, IN 46368. An application to modify the emission source was received on August 30, 2006. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

(a) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-1, rated at 600 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(b) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-2, rated at 400 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(c) One (1) conveyor stacker, including a feed hopper, identified as CS-3, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(d) One (1) conveyor stacker, including a feed hopper, identified as CS-4, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

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.

The source may begin construction and operation when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12.

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, press 0 and ask for Allen R. Davidson or extension 3-5693, or dial (317) 233-5693.

Sincerely,

Original Signed By:
Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments
ARD

cc: File - Porter County
Porter County Health Department
IDEM - Northwest Regional Office
Air Compliance Section Inspector - Michael Hall
Compliance Data Section
Administrative and Development
ISG Burns Harbor, LLC - 250 W. U.S. Highway 12, Burns Harbor, IN 46304-9745

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	**Mid-Continent Coal and Coke Company**
Source Location:	**U. S. Highway 12, Burns Harbor, IN 46368**
County:	**Porter**
SIC Code:	**5052**
Operation Permit No.:	**127-7634-00108**
Operation Permit Issuance Date:	**June 30, 2006**
Source Modification No.:	**127-23580-00108**
Permit Modification No.:	**127-23615-00108**
Permit Reviewer:	**Allen R. Davidson**

Existing Approvals

Mid-Continent Coal and Coke Company was issued Part 70 Operating Permit 127-7634-00108 on June 30, 2006. There have been no other approvals issued to the emission source since that date.

Mid-Continent Coal and Coke Company is considered a contractor of ISG Burns Harbor, LLC. Separate Part 70 permits will be issued to ISG Burns Harbor, LLC and Mid-Continent Coal and Coke Company solely for administrative purposes. The Part 70 permit for ISG Burns Harbor, LLC (127-6301-00001) is pending.

County Attainment Status

The emission source is located in Porter County.

Pollutant	Status
PM_{10}	attainment
$PM_{2.5}$	nonattainment
SO_2	attainment
NO_2	attainment
8-hour Ozone	nonattainment (moderate)
CO	attainment
Lead	attainment

On August 7, 2006, a temporary emergency rule took effect revoking the one-hour ozone standard in Indiana. The Indiana Air Pollution Control Board has approved a permanent rule revision to incorporate these changes into 326 IAC 1-4-1. The permanent revision to 326 IAC 1-4-1 will take effect prior to the expiration of the emergency rule.

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for emission offset, 326 IAC 2-3.

(b) U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Porter County as nonattainment for $PM_{2.5}$. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment

areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions pursuant to the requirements of Emission Offset, 326 IAC 2-3.

(c) Porter County has been classified as attainment or unclassifiable in Indiana for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

See "Permit Level Determination – PSD or Emission Offset" for more details regarding PSD or Emission Offset applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Potential to Emit (tons/yr)
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

(a) Mid-Continent Coal and Coke Company is a contractor for ISG Burns Harbor, LLC, and is considered to be a single emission source with this steel mill due to contractual control. As a result, this source is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) This existing source is classified as a major stationary source under PSD (326 IAC 2-2) because:

(1) a regulated pollutant is emitted at a rate of 100 tons per year or more, and

(2) it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(c) This existing source is a major stationary source under Emission Offset (326 IAC 2-3), because PM_{10} and VOC are emitted at a rate of 100 tons per year or more.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential to Emit (tons/yr)
Single HAP	greater than 10
Total HAPs	greater than 25

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Background and Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Mid-Continent Coal and Coke Company on August 30, 2006, relating to the operation of four portable coke fines screening operations located at U. S. Highway 12, Burns Harbor, IN 46368. The application involves a request to add four (4) conveyor stackers, used for the stockpiling of material and the loading of trucks, barges and ships.

New Emission Units and Pollution Control Equipment

The application includes information relating to the prior approval for the construction and operation of the following equipment:

(a) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-1, rated at 600 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(b) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-2, rated at 400 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(c) One (1) conveyor stacker, including a feed hopper, identified as CS-3, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(d) One (1) conveyor stacker, including a feed hopper, identified as CS-4, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

Existing Emission Units and Pollution Control Equipment

The application does not involve modification of any existing emission units or pollution control equipment.

Insignificant Activities

The application does not involve any insignificant activities, as defined in 326 IAC 2-7-1(21).

Enforcement Issues

There are no enforcement actions regarding this proposed modification.

Emission Calculations

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

Permit Level Determination – Part 70

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

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. 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/yr)
PM	20.3
PM_{10}	9.6
SO_2	0.0
VOC	0.0
CO	0.0
NO_x	0.0

HAPs	Potential to Emit (tons/yr)
Total	0.0

Justification for Minor Source Modification

The source modification involves a modification where the increase in potential to emit is less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year for both particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM_{10}). As a result, this change is classifiable as a minor source modification under 326 IAC 2-7-10.5(d)(3).

Justification for Minor Permit Modification

This change cannot be processed as an Administrative Amendment under 326 IAC 2-7-11(a) but it is not prohibited from being processed as a Minor Permit Modification under 2-7-12(b)(1). It shall be processed as a Minor Permit Modification under 326 IAC 2-7-12(b).

Permit Level Determination – PSD or Emission Offset

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment or control measure is considered federally enforceable only after issuance of this Part 70 Minor Source Modification and Minor Permit Modification, and only to the extent that the effect of the control equipment or control measure is made practically enforceable in the permit.

Emission Unit	PM	PM_{10}	SO_2	NO_X	VOC	CO
Conveyor Stacker CS-1	4.34	2.05	0.0	0.0	0.0	0.0
Conveyor Stacker CS-2	2.90	1.37	0.0	0.0	0.0	0.0
Conveyor Stacker CS-3	1.45	0.68	0.0	0.0	0.0	0.0
Conveyor Stacker CS-4	1.45	0.68	0.0	0.0	0.0	0.0
Total	10.13	4.79	0.0	0.0	0.0	0.0

The Permittee shall control fugitive particulate matter emissions by spraying the material with water on an as-needed basis. This control measure has an estimated 50% control efficiency.

(a) This modification to an existing major stationary source is not major because the emissions increase of every attainment regulated pollutant is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(b) Porter County has been designated as nonattainment 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 Steve Page, Director of OAQPS, until EPA promulgates the $PM_{2.5}$ major NSR regulations, states should assume that a major stationary source’s PM_{10} emissions represent $PM_{2.5}$ emissions. IDEM will use the PM_{10} nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the $PM_{2.5}$ NAAQS. A significant emissions increase would be a net emissions increase or the potential of fifteen (15) tons per year or greater of PM_{10}. Therefore, assuming that PM_{10} emissions represent $PM_{2.5}$ emissions, 326 IAC 2-3 does not apply for $PM_{2.5}$.

Federal Rule Applicability Determination

326 IAC 12 and 40 CFR Part 60 (New Source Performance Standards (NSPS))

There are no New Source Performance Standards applicable to this proposed modification. 40 CFR 60 Subpart OOO, "Standards Of Performance For Nonmetallic Mineral Processing Plants," is not applicable since metallurgical coke does not conform to the definition of “nonmetallic mineral” in 40 CFR 60.671.

326 IAC 14, 326 IAC 20 and 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants (NESHAPs))

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) applicable to this proposed modification.

State Rule Applicability Determination – Entire Source

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

This modification to an existing major stationary source is not a major modification for Prevention of Significant Deterioration (PSD) because the emissions increase of all attainment regulated pollutants is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply to this modification.

326 IAC 2-3 (Emission Offset)

This modification to an existing major stationary source is not a major modification for Emission Offset, 326 IAC 2-3. No nonattainment pollutant has the potential to emit at major modification thresholds. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

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

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source was existing as of July 27, 1997. Also, the modification by itself does not have potential to emit greater than ten (10) tons per year of any HAP or twenty-five (25) tons per year of any combination of HAPs.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, this source is subject to 326 IAC 2-6 (Emission Reporting). Also, the source has potential to emit greater than the thresholds in 326 IAC 2-6-3(a)(1). Therefore, pursuant to 326 IAC 2-6-3(a)(1), an emission statement covering the previous calendar year must be submitted by July 1 annually. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-7 (Part 70 Permit Program)

This source is subject to the provisions of 326 IAC 2-7 due to the following:

(a) The potential to emit of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM_{10}) are both greater than 100 tons per year.

(b) The potential to emit of sulfur dioxide (SO_2) is equal to or greater than one hundred (100) tons per year.

(c) The potential to emit of nitrogen oxides (NOx) is equal to or greater than one hundred (100) tons per year.

(d) The potential to emit of carbon monoxide (CO) is equal to or greater than one hundred (100) tons per year.

(e) The potential to emit of volatile organic compounds (VOC) is equal to or greater than one hundred (100) tons per year.

(f) The potential to emit of hazardous air pollutant (HAP) emissions is greater than ten (10) tons per year for a single HAP.

(g) The potential to emit of hazardous air pollutant (HAP) emissions is greater than twenty-five (25) tons per year for a combination of HAPs.

326 IAC 5-1 (Opacity Limitations)

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

State Rule Applicability Determination – Four (4) Conveyor Stackers

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

The conveyor stackers are subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate matter (PM) emissions shall be limited by the following equation for process weight rates in excess of sixty thousand (60,000) pounds per hour:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(a) For conveyor stacker CS-1, with a process weight rate of 600 tons per hour, this equation provides a limit of 71.2 pounds per hour.

(b) For conveyor stacker CS-2, with a process weight rate of 400 tons per hour, this equation provides a limit of 66.3 pounds per hour.

(c) For conveyor stackers CS-3 and CS-4, each with a process weight rate of 200 tons per hour, this equation provides a limit of 58.5 pounds per hour for each stacker.

The conveyor stackers comply with these limits without control devices. See Appendix A of this document for detailed emission calculations. (1 page)

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

The conveyor stackers are subject to 326 IAC 6-5. Pursuant to 326 IAC 6-5-4, the Permittee shall control fugitive particulate matter emissions by spraying the material with water on an as-needed basis.

Proposed Changes

In addition to the changes directly related to the modification, OAQ made the following revisions to the Part 70 permit:

(a) All instances of PM-10 in the permit have been changed to read PM_{10}.

(b) OAQ has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, OAQ has deleted paragraph (b) of Section B - Preventive Maintenance Plan, and has amended Section B - Emergency Provisions.

(c) For clarification purposes, OAQ has revised Section B - Operational Flexibility.

(d) OAQ has updated Section C - Incineration, since 326 IAC 9 is federally enforceable. 326 IAC 9 was approved into the Indiana State Implementation Plan on November 30, 2004 with an effective date of January 31, 2005.

(e) In order to avoid duplication of requirements which may be included in D sections, Section C - Operation of Equipment, has been removed from the permit.

(f) OAQ realizes that Section C - Instrument Specifications can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. OAQ has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter.

(g) The original source modification numbers will be removed from the quarterly report forms.

(h) The Table of Contents will be updated to reflect deleted and renumbered conditions.

The changes listed below are being proposed to Part 70 Operating Permit No. 127-7634-00108. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

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 portable coke fines screening operations.

Responsible Official:	President
Source Address:	U.S. Highway 12, Burns Harbor, Indiana 46304
Mailing Address:	915 W. 175th Street, Homewood, IL 60430
General Source Phone Number:	(708) 798-1110
SIC Code:	5052
County Location:	Porter
Source Location Status:	Nonattainment for ~~1 hour and~~ 8-hour ozone standard and $PM_{2.5}$ Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Listed Source Categories

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

The Mid-Continent Coal and Coke operations consist of the following emission units and pollution control devices located at U.S. Highway 12, Burns Harbor:

(a) One (1) metallurgical coke screening operation, identified as Plant 1, with a maximum capacity of 50 tons per hour of < 1.0 inch coke, constructed in 1968, with fugitive dust controlled on an as needed basis by water sprays, comprised of the following fugitive dust emitting equipment:

(1) One (1) vibrating coke screen, identified as ID 1;

(2) Three (3) conveyors, collectively identified as ID 2;

(3) One (1) < 1.0 inch size coke stockpile, with a maximum capacity of 1.5 acreage, identified as ID 2A; and

(4) One (1) < 0.5 inch size coke stockpile, with a maximum capacity of 1.5 acreage, identified as ID 2B.

(b) One (1) screening operation, identified as Plant 2, with a maximum capacity of 50 tons per hour of coke, constructed in 2001, comprised of the following equipment:

(1) One (1) coke screen (ID PS);

(2) Three (3) conveyors (ID PC1 through PC3);

(3) One (1) hopper (ID PH1);

(4) One (1) internal combustion diesel generator, used to generate electric power, with a maximum capacity of 164 hp (ID PG1); and

(5) One (1) front-end loader with a diesel internal combustion engine with a maximum capacity of 180 hp (ID PF1).

(c) One (1) mobile screening unit, identified as the Sump Plant, constructed in 2005, with a maximum capacity of 60 tons of coke fines per hour, consisting of the following:

(1) One (1) 6’ x 12’ vibrating single deck screen;

(2) One (1) 30” x 50’ rubber conveyor;

(3) Two (2) 30” x 60’ rubber conveyors;

(4) One 10’ x 12’ feed hopper;

(5) One (1) front-end loader, identified as 22Z04441, with a diesel fueled internal combustion engine with a maximum capacity of 180 hp;

(6) Coke storage piles with a maximum total area of 10.11 acres; and

(7) Paved and unpaved roadways.

Note: Electric power to the Sump Plant will be supplied by ISG Burns Harbor, LLC.

(d) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-1, rated at 600 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(e) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-2, rated at 400 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(f) One (1) conveyor stacker, including a feed hopper, identified as CS-3, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(g) One (1) conveyor stacker, including a feed hopper, identified as CS-4, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

And the following plant located at 1150 East Boundary Road, Portage:

~~(d)~~ **(h)** Main screening plant, identified as Plant 3, constructed in 1968, with a maximum capacity of 23.8 tons per hour of coke, comprised of:

(1) one (1) 28' x 14' feed hopper (ID MS1), with a maximum capacity of 85 tons per hour of metallurgical coke;

(2) two (2) PEP screens (ID MS2 and MS3), each with a maximum capacity of 42.5 tons per hour of metallurgical coke;

(3) one (1) 6' x 20' Hewitt Robbins Vibrator (ID MS4), with a maximum capacity of 85 tons per hour of metallurgical coke;

(4) six (6) rubber conveyors (ID MS5 thru MS10), each with a maximum capacity of 42.5 tons per hour of metallurgical coke;

(5) one (1) front screening plant, consisting of one (1) 12' x 12' feed hopper (ID FS1), one (1) 6' x 12' PEP screen (ID FS2), and five (5) rubber conveyors (ID FS3 thru 7) each with a maximum capacity of 25 tons per hour of metallurgical coke; and

(6) Coke storage piles with a combined total maximum capacity of 13.7 acres.

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
Indianapolis, Indiana 46204-2251

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~~ **PMPs do** not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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 the 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: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

and for the Northwest Regional Office;

Telephone Number: 1-888-209-8892 (ask for Office of Air Quality, Compliance Section)
Telephone Number: 219-757-0265 (ask for Air Compliance Section)
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:

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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) **The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However,** 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.20 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);~~
The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

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.~~
The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make 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).~~
The Permittee may trade emissions increases and decreases at 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.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

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

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

~~Except as otherwise provided by statute, 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 unit(s) vented to the control equipment are in operation.~~

[Subsequent conditions were renumbered.]

~~C.13~~ **C.12** 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.~~
When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) ~~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.~~
The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

The facility description in Section D.4 is hereby amended as follows:

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Plant 3

~~(d)~~ **(h)** Main screening plant, identified as Plant 3, constructed in 1968, with a maximum capacity of 23.8 tons per hour of coke, comprised of:

(1) one (1) 28' x 14' feed hopper (ID MS1), with a maximum capacity of 85 tons per hour of metallurgical coke;

(2) two (2) PEP screens (ID MS2 and MS3), each with a maximum capacity of 42.5 tons per hour of metallurgical coke;

(3) one (1) 6' x 20' Hewitt Robbins Vibrator (ID MS4), with a maximum capacity of 85 tons per hour of metallurgical coke;

(4) six (6) rubber conveyors (ID MS5 thru MS10), each with a maximum capacity of 42.5 tons per hour of metallurgical coke;

(5) one (1) front screening plant, consisting of one (1) 12' x 12' feed hopper (ID FS1), one (1) 6' x 12' PEP screen (ID FS2), and five (5) rubber conveyors (ID FS3 thru 7) each with a maximum capacity of 25 tons per hour of metallurgical coke; and

(6) Coke storage piles with a combined total maximum capacity of 13.7 acres.

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

Also, Section D.5 has been added to the permit to read as follows:

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(d) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-1, rated at 600 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(e) One (1) conveyor stacker, including a feed hopper and integrated feed conveyor, identified as CS-2, rated at 400 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(f) One (1) conveyor stacker, including a feed hopper, identified as CS-3, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(g) One (1) conveyor stacker, including a feed hopper, identified as CS-4, rated at 200 tons per hour. The unit is used for the stockpiling of material and the loading of trucks, barges and ships.

(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.5.1 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate matter (PM) emissions shall be limited by the following equation for process weight rates in excess of sixty thousand (60,000) pounds per hour:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(a) For conveyor stacker CS-1, with a process weight rate of 600 tons per hour, this equation provides a limit of 71.2 pounds per hour.

(b) For conveyor stacker CS-2, with a process weight rate of 400 tons per hour, this equation provides a limit of 66.3 pounds per hour.

(c) For conveyor stackers CS-3 and CS-4, each with a process weight rate of 200 tons per hour, this equation provides a limit of 58.5 pounds per hour for each stacker.

D.5.2 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5-4, the Permittee shall control fugitive particulate matter emissions by spraying the material with water on an as-needed basis.

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

D.5.3 Visible Emissions Notations

(a) Visible emission notations of the process emission points shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation of this permit.

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

D.5.4 Record Keeping Requirements

(a) To document compliance with condition D.5.3, the Permittee shall maintain records of visible emission notations of the emission points.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 127-23580-00108 and Minor Permit Modification No. 127-23615-00108. The staff recommend to the Commissioner that this Part 70 Minor Source Modification and Minor Permit Modification be approved.

Appendix A: Emissions Calculations

Company Name: Mid-Continent Coal and Coke Company
Address City IN Zip: US Highway 12, Burns Harbor IN 46304
ID: 127-23580-00108 and 127-23615-00108
Reviewer: Allen R. Davidson
Date: 09/05/06

The following calculations determine emissions before and after controls based on information contained in EPA document AP-42, Chapter 13.2.4, "Aggregate Handling and Storage Piles."

$E = k * (0.0032) * ((U/5)^{1.3} / (M/2)^{1.4})$
$= 0.003305$ lb/ton

where k = 0.74 (for PM)
U = 10.00 mi/hr mean wind speed
M = 3 % moisture content

(50% control efficiency is assumed for wet dust suppression.)

							Before Control	After Control
CS-1:	600.00	ton/hr *	0.003305 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		8.69 ton PM/yr	4.34 ton PM/yr
CS-2:	400.00	ton/hr *	0.003305 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		5.79 ton PM/yr	2.90 ton PM/yr
CS-3:	200.00	ton/hr *	0.003305 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		2.90 ton PM/yr	1.45 ton PM/yr
CS-4:	200.00	ton/hr *	0.003305 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		2.90 ton PM/yr	1.45 ton PM/yr
Total:							20.27 ton PM/yr	10.13 ton PM/yr

$E = k * (0.0032) * ((U/5)^{1.3} / (M/2)^{1.4})$
$= 0.001563$ lb/ton

where k = 0.35 (for PM_{10})
U = 10.00 mi/hr mean wind speed
M = 3 % moisture content

(50% control efficiency is assumed for wet dust suppression.)

							Before Control	After Control
CS-1:	600.00	ton/hr *	0.001563 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		4.11 ton PM_{10}/yr	2.05 ton PM_{10}/yr
CS-2:	400.00	ton/hr *	0.001563 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		2.74 ton PM_{10}/yr	1.37 ton PM_{10}/yr
CS-3:	200.00	ton/hr *	0.001563 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		1.37 ton PM_{10}/yr	0.68 ton PM_{10}/yr
CS-4:	200.00	ton/hr *	0.001563 lb PM/ton *	8760 hr/yr /	2000 lb/ton =		1.37 ton PM_{10}/yr	0.68 ton PM_{10}/yr
Total:							9.59 ton PM_{10}/yr	4.79 ton PM_{10}/yr

The following calculations determine the emission limits under 326 IAC 6-3-2:

E = 55 * (600 ^ 0.11) - 40 = 71.16 lb/hr
71.16 lb/hr * 8760 hr/yr / 2000 lb/ton = 311.69 ton/yr

E = 55 * (400 ^ 0.11) - 40 = 66.31 lb/hr
66.31 lb/hr * 8760 hr/yr / 2000 lb/ton = 290.45 ton/yr

E = 55 * (200 ^ 0.11) - 40 = 58.51 lb/hr
58.51 lb/hr * 8760 hr/yr / 2000 lb/ton = 256.27 ton/yr