INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: June 20, 2013

RE: Peabody Midwest Mining LLC – Bear Run Mine / 153-33173-00011

FROM: Matthew Stuckey, Branch 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, Suite N 501E, 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 6/13/13

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Mr. James F. Tolen
Peabody Midwest Mining LLC - Bear Run Mine
7100 Eagle Crest Blvd, Suite 100
Evansville, IN 47715

June 20, 2013

Re: 153-33173-00011
Significant Permit Revision to
M153-28491-00011

Dear Mr. Tolen:

Peabody Midwest Mining LLC - Bear Run Mine was issued a Minor Source Operating Permit (MSOP) No. M153-28491-00011 on August 9, 2010 for a stationary coal mine collocated with a coal preparation plant located at 7255 East CR 600 South, Carlisle, Indiana 47838. On May 7, 2013, the Office of Air Quality (OAQ) received an application from the source requesting to add two (2) conveyors, a screener, and a storage pile for the removal and storage of oversized material. Pursuant to the provisions of 326 IAC 2-6.1-6, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-6.1-6(i). Pursuant to the provisions of 326 IAC 2-6.1-6, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
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 (Revocation), 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.

Pursuant to 326 IAC 2-6.1-6, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

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, please contact Kristen Willoughby of my staff at 317-233-3031 or 1-800-451-6027, and ask for extension 3-3031.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit and Appendix A

JA/kw
cc: File - Sullivan County
SullivanCounty Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch

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Michael R. Pence
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Commissioner

Minor Source Operating Permit
OFFICE OF AIR QUALITY

Peabody Midwest Mining LLC - Bear Run Mine
7255 East CR 600 South
Carlisle, Indiana 47838

(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 to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M153-28491-00011	
Original Signed and Issued by: Alfred C. Dumaual, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: August 9, 2010 Expiration Date: August 9, 2015

Notice-Only Change No. 153-29637-00011, issued October 14, 2010
Notice-Only Change No. 153-30273-00011, issued March 23, 2011

Significant Permit Revision No. 153-33173-00011	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 20, 2013 Expiration Date: August 9, 2015

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary coal mine collocated with a coal preparation plant.

Source Address:	7255 East CR 600 South, Carlisle, Indiana 47838
General Source Phone Number:	812-434-8573
SIC Code:	1221
County Location:	Sullivan
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) one (1) open pit surface coal mining operation, approved for construction in 2005 and approved for increased production in 2010, with a maximum production rate of 15,918,500 tons of raw coal and coal refuse per year, combined, with fugitive emissions emitted to the atmosphere, including the following activities:

(1) two (2) draglines, identified as Bucyrus Erie 2550 and Bucyrus Erie 2570-W, approved for construction and operation at the Bear Run Mine in 2005 and 2010, respectively;

(2) removal and stockpiling of topsoil and subsoil layers using scrapers bulldozers, front-end loaders, haul trucks, and other machinery;

(3) drilling and blasting of the rocky material (overburden) covering the coal seam;

(4) removal and stockpiling of overburden using two (2) draglines, scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(5) removal and stockpiling of broken coal using shovels, bulldozers, front-end loaders, haul trucks, and other machinery;

(6) storage piles consisting of topsoil, subsoil, overburden, and/or coal;

(7) loading of broken coal into haul trucks using shovels, front-end loaders, and other machinery;

(8) transport of coal at the coal mine site on unpaved haul roads;

(9) coal mine reclamation activities, including replacement and grading of overburden, subsoil, and topsoil using scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(b) transport of coal at the coal preparation and processing plant site on unpaved roads;

(c) one (1) coal preparation and processing plant, constructed in 2010 and approved for increased production in 2010, with a maximum processing rate of 15,918,500 tons of raw coal and coal refuse per year, combined, including the following equipment and activities:

(1) Process Circuit

(A) one (1) raw coal storage pile, identified as Unit 1, exhausting to the atmosphere;

(B) one (1) coal truck unloading station for the Process Circuit, identified as Unit 2, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(C) one (1) feeder bin, identified as Unit 3, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 4, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 5, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 6, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(G) one (1) rotary breaker outlet drop to breaker reject storage pile, identified as Unit 7, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(H) one (1) breaker reject storage pile, identified as Unit 8, and exhausting to the atmosphere;

(I) one (1) enclosed raw coal conveyor, identified as Unit 9, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(J) one (1) raw coal stacking tube, identified as Unit 10, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(K) one (1) raw coal storage pile, identified as Unit 11, and exhausting to the atmosphere;

(L) one (1) enclosed raw coal stacking tube transfer conveyor, identified as Unit 12, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) one (1) raw coal stacking tube, identified as Unit 13, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(N) one (1) raw coal storage pile, identified as Unit 14, and exhausting to the atmosphere;

(O) one (1) raw coal underground reclaim tunnel and one (1) raw coal conveyor, identified as Unit 15, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(P) one (1) enclosed coal washing and processing unit, identified as Preparation Plant, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(Q) one (1) enclosed coal refuse conveyor, identified as Unit 16, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(R) one (1) reject bunker storage pile, identified as Unit 17, and exhausting to the atmosphere;

(S) one (1) enclosed coal refuse storage bin with truck loadout, identified as Unit 18, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(T) one (1) enclosed stoker coal conveyor, identified as Unit 19, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(U) one (1) stoker coal storage bin with loadout weigh belt, identified as Unit 20, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(V) one (1) enclosed stoker coal conveyor, identified as Unit 20a, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(W) one (1) stoker coal stacking conveyor, identified as Unit 20b, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(X) one (1) stoker coal storage pile, identified as Unit 20c, and exhausting to the atmosphere;

(Y) one (1) enclosed clean coal conveyor, identified as Unit 21, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(Z) one (1) clean coal stacking tube, identified as Unit 22, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(AA) one (1) clean coal storage pile, identified as Unit 23, and exhausting to the atmosphere;

(BB) one (1) enclosed clean coal stacking tube transfer conveyor, identified as Unit 24, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(CC) one (1) clean coal stacking tube, identified as Unit 25, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(DD) one (1) clean coal storage pile, identified as Unit 26, and exhausting to the atmosphere;

(EE) one (1) enclosed clean coal underground reclaim tunnel and one (1) enclosed clean coal loadout conveyor, identified as Unit 27, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(FF) one (1) enclosed clean coal loadout conveyor, identified as Unit 28, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(GG) one (1) clean coal storage bin with train loadout, identified as Unit 29, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(HH) one (1) enclosed industrial steam coal loadout conveyor, identified as Unit 30, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(II) one (1) industrial steam coal storage pile, identified as Unit 31, and exhausting to the atmosphere;

(2) Dry Crush Circuit

(A) one (1) raw coal storage pile, identified as Unit 32, exhausting to the atmosphere;

(B) one (1) feeder bin system, identified as Unit 33, with a maximum capacity of 2000 tons per hour exhausting to the atmosphere;

(C) one (1) feeder bin outlet drop to raw coal conveyor, identified as Unit 34, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 35, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 36, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 37, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(G) one (1) enclosed breaker outlet coal conveyor, identified as Unit 38, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(H) one (1) enclosed coarse coal conveyor, identified as Unit 39, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(I) one (1) coarse coal storage pile, identified as Unit 40, exhausting to the atmosphere;

(J) one (1) crusher, identified as Unit 41, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(K) one (1) enclosed coal conveyor to screen, identified as Unit 42A, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(L) one (1) scalping screen, identified as Unit 42S, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) one (1) enclosed coal conveyor from screen, identified as Unit 42B, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(N) one (1) oversize coal storage pile, identified as Unit 42O, approved in 2013 for construction, exhausting to the atmosphere;

(O) one (1) enclosed dry crush coal conveyor with radial stacker, identified as Unit 42, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(P) one (1) dry crush coal storage pile (unloading to the underground reclaim tunnel), identified as Unit 43, exhausting to the atmosphere;

(3) Dry Stoker Circuit

(A) one (1) feeder bin system, identified as Unit 44, with a maximum capacity of 400 tons per hour exhausting to the atmosphere;

(B) one (1) feeder bin outlet drop to coal conveyor, identified as Unit 45, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(C) one (1) coal conveyor, identified as Unit 46, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(D) one (1) screen, identified as Unit 51, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(E) one (1) collecting coal conveyor, identified as Unit 50, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(F) one (1) oversized (stoker) coal stacker conveyor, identified as Unit 52, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(G) one (1) oversized (stoker) coal storage pile, identified as Unit 53, exhausting to the atmosphere;

(H) one (1) fines coal stacker conveyor, identified as Unit 54, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(I) one (1) fines coal storage pile, identified as Unit 55, exhausting to the atmosphere;

Under 40 CFR 60, Subpart Y, the equipment and activities associated with the coal preparation and processing plant listed under item (c) above are considered affected facilities. [40 CFR 60, Subpart Y][326 IAC 12]

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M153-28491-00011, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

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

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.9 Preventive Maintenance Plan [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) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

(b) 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.

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M153-28491-00011 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

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

B.15 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]

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

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

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

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of 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.

C.4 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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

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

C.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

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

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11]

(a) 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 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.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11][326 IAC 2-6.1-2][IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

(a) one (1) open pit surface coal mining operation, approved for construction in 2005 and approved for increased production in 2010, with a maximum production rate of 15,918,500 tons of raw coal and coal refuse per year, combined, with fugitive emissions emitted to the atmosphere, including the following activities:

(1) two (2) draglines, identified as Bucyrus Erie 2550 and Bucyrus Erie 2570-W, approved for construction and operation at the Bear Run Mine in 2005 and 2010, respectively;

(2) removal and stockpiling of topsoil and subsoil layers using scrapers bulldozers, front-end loaders, haul trucks, and other machinery;

(3) drilling and blasting of the rocky material (overburden) covering the coal seam;

(4) removal and stockpiling of overburden using two (2) draglines, scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(5) removal and stockpiling of broken coal using shovels, bulldozers, front-end loaders, haul trucks, and other machinery;

(6) storage piles consisting of topsoil, subsoil, overburden, and/or coal;

(7) loading of broken coal into haul trucks using shovels, front-end loaders, and other machinery;

(8) transport of coal at the coal mine site on unpaved haul roads;

(9) coal mine reclamation activities, including replacement and grading of overburden, subsoil, and topsoil using scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(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 2-6.1-5(a)(1)]

D.1.1 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions at the coal mine site shall be controlled according to the attached plan as in Attachment A.

SECTION D.2 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

(b) transport of coal at the coal preparation and processing plant site on unpaved roads;

(c) one (1) coal preparation and processing plant, constructed in 2010 and approved for increased production in 2010, with a maximum processing rate of 15,918,500 tons of raw coal and coal refuse per year, combined, including the following equipment and activities:

(1) Process Circuit

(A) one (1) raw coal storage pile, identified as Unit 1, exhausting to the atmosphere;

(B) one (1) coal truck unloading station for the Process Circuit, identified as Unit 2, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(C) one (1) feeder bin, identified as Unit 3, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 4, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 5, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 6, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(G) one (1) rotary breaker outlet drop to breaker reject storage pile, identified as Unit 7, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(H) one (1) breaker reject storage pile, identified as Unit 8, and exhausting to the atmosphere;

(I) one (1) enclosed raw coal conveyor, identified as Unit 9, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(J) one (1) raw coal stacking tube, identified as Unit 10, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(K) one (1) raw coal storage pile, identified as Unit 11, and exhausting to the atmosphere;

(L) one (1) enclosed raw coal stacking tube transfer conveyor, identified as Unit 12, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) one (1) raw coal stacking tube, identified as Unit 13, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(N) one (1) raw coal storage pile, identified as Unit 14, and exhausting to the atmosphere;

(O) one (1) raw coal underground reclaim tunnel and one (1) raw coal conveyor, identified as Unit 15, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(P) one (1) enclosed coal washing and processing unit, identified as Preparation Plant, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(Q) one (1) enclosed coal refuse conveyor, identified as Unit 16, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(R) one (1) reject bunker storage pile, identified as Unit 17, and exhausting to the atmosphere;

(S) one (1) enclosed coal refuse storage bin with truck loadout, identified as Unit 18, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(T) one (1) enclosed stoker coal conveyor, identified as Unit 19, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(U) one (1) stoker coal storage bin with loadout weigh belt, identified as Unit 20, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(V) one (1) enclosed stoker coal conveyor, identified as Unit 20a, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(W) one (1) stoker coal stacking conveyor, identified as Unit 20b, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(X) one (1) stoker coal storage pile, identified as Unit 20c, and exhausting to the atmosphere;

(Y) one (1) enclosed clean coal conveyor, identified as Unit 21, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(Z) one (1) clean coal stacking tube, identified as Unit 22, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(AA) one (1) clean coal storage pile, identified as Unit 23, and exhausting to the atmosphere;

(BB) one (1) enclosed clean coal stacking tube transfer conveyor, identified as Unit 24, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(CC) one (1) clean coal stacking tube, identified as Unit 25, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(DD) one (1) clean coal storage pile, identified as Unit 26, and exhausting to the atmosphere;

(EE) one (1) enclosed clean coal underground reclaim tunnel and one (1) enclosed clean coal loadout conveyor, identified as Unit 27, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(FF) one (1) enclosed clean coal loadout conveyor, identified as Unit 28, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(GG) one (1) clean coal storage bin with train loadout, identified as Unit 29, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(HH) one (1) enclosed industrial steam coal loadout conveyor, identified as Unit 30, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(II) one (1) industrial steam coal storage pile, identified as Unit 31, and exhausting to the atmosphere;

(2) Dry Crush Circuit

(A) one (1) raw coal storage pile, identified as Unit 32, exhausting to the atmosphere;

(B) one (1) feeder bin system, identified as Unit 33, with a maximum capacity of 2000 tons per hour exhausting to the atmosphere;

(C) one (1) feeder bin outlet drop to raw coal conveyor, identified as Unit 34, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 35, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 36, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 37, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(G) one (1) enclosed breaker outlet coal conveyor, identified as Unit 38, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(H) one (1) enclosed coarse coal conveyor, identified as Unit 39, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(I) one (1) coarse coal storage pile, identified as Unit 40, exhausting to the atmosphere;

(J) one (1) crusher, identified as Unit 41, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(K) one (1) enclosed coal conveyor to screen, identified as Unit 42A, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(L) one (1) scalping screen, identified as Unit 42S, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) one (1) enclosed coal conveyor from screen, identified as Unit 42B, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(N) one (1) oversize coal storage pile, identified as Unit 42O, approved in 2013 for construction, exhausting to the atmosphere;

(O) one (1) enclosed dry crush coal conveyor with radial stacker, identified as Unit 42, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(P) one (1) dry crush coal storage pile (unloading to the underground reclaim tunnel), identified as Unit 43, exhausting to the atmosphere;

(3) Dry Stoker Circuit

(A) one (1) feeder bin system, identified as Unit 44, with a maximum capacity of 400 tons per hour exhausting to the atmosphere;

(B) one (1) feeder bin outlet drop to coal conveyor, identified as Unit 45, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(C) one (1) coal conveyor, identified as Unit 46, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(D) one (1) screen, identified as Unit 51, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(E) one (1) collecting coal conveyor, identified as Unit 50, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(F) one (1) oversized (stoker) coal stacker conveyor, identified as Unit 52, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(G) one (1) oversized (stoker) coal storage pile, identified as Unit 53, exhausting to the atmosphere;

(H) one (1) fines coal stacker conveyor, identified as Unit 54, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(I) one (1) fines coal storage pile, identified as Unit 55, exhausting to the atmosphere;

Under 40 CFR 60, Subpart Y, the equipment and activities associated with the coal preparation and processing plant listed under item (c) above are considered affected facilities.
[40 CFR 60, Subpart Y][326 IAC 12]

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.2.1 Coal Moisture Content and Particulate Matter (PM) Emission Limitations [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the source shall comply with the following:

(a) PM emissions from the material processing, handling, crushing, screening, and conveying operations at the coal preparation/processing plant shall not exceed 0.00395 pounds per ton of coal throughput;

(b) PM emissions from the material storage piles at the coal preparation/processing plant shall not exceed 0.00185 pounds per ton of coal throughput;

(c) PM emissions from the unpaved roads at the coal preparation and processing plant site shall not exceed 0.0152 pounds per ton of coal throughput;

(d) moisture content of the coal processed at the coal preparation/processing plant prior to washing in the Preparation Plant shall be equal to or greater than 10.0 percent by weight;

(e) moisture content of the coal processed at the coal preparation/processing plant after washing in the Preparation Plant shall be equal to or greater than 11.5 percent by weight;

Compliance with these limits, combined with the maximum throughput capacity of the coal preparation/processing plant (15,918,500 tons/yr) and PM emissions from other emission units at the coal preparation/processing plant, shall limit the total PM emissions from the coal preparation/processing plant to less than 250 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following facilities shall not exceed the allowable emission rates listed in the following table:

Unit ID	Description	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
1	Raw coal storage pile	2000	86.90
2	Coal truck unloading station for the Process Circuit	2000	86.90
3	Feeder bin	2000	86.90
4	Raw coal conveyor	2000	86.90
5	Scalping screen	2000	86.90
6	Rotary breaker	2000	86.90
7	Rotary breaker outlet drop to breaker reject storage pile	2000	86.90
9	Raw coal conveyor	2000	86.90

Unit ID	Description	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
10	Raw coal stacking tube	2000	86.90
12	Raw coal stacking tube transfer conveyor	2000	86.90
13	Raw coal stacking tube	2000	86.90
15	Raw coal conveyor	2000	86.90
21	Plant clean coal conveyor	1600	83.83
22	No. 4 clean coal stacking tube	1600	83.83
24	Clean coal stacking tube transfer conveyor	1500	82.95
25	No. 3 clean coal stacking tube	1500	82.95
27	Clean coal loadout conveyor No. 1	4000	96.96
28	Clean coal loadout conveyor No. 2	4000	96.96
29	Clean coal storage bin with train loadout	4000	96.96
30	Industrial steam coal loadout conveyor	4000	96.96
32	Raw coal storage pile	2000	86.90
33	Feeder bin system	2000	86.90
34	Feeder bin outlet drop to raw coal conveyor	2000	86.90
35	Raw coal conveyor	2000	86.90
36	Scalping screen	2000	86.90
37	Rotary breaker	2000	86.90
38	Breaker outlet coal conveyor	2000	86.90
39	Coarse coal conveyor	2000	86.90
41	Crusher	2000	86.90
42S	Scalping screen	400	66.31
42	Dry crush coal conveyor with radial stacker	2000	86.90
51	Secondary screen	400	66.31

These pounds per hour limitations were calculated with the following equations:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed the emission rate derived by the equation above, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.2.3 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions at the coal preparation/processing plant shall be controlled according to the attached plan as in Attachment A.

D.2.4 General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1] [40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart Y.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

D.2.5 New Source Performance Standards (NSPS) for Coal Preparation and Processing Plants [40 CFR Part 60, Subpart Y][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Y (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart Y:

(a) For units that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008:

(1) 40 CFR 60.250(a) and (b)
(2) 40 CFR 60.251
(3) 40 CFR 60.254(a)
(4) 40 CFR 60.255(a)
(5) 40 CFR 60.257
(6) 40 CFR 60.258(b), (c), and (d)

(b) For units that commenced construction, reconstruction or modification after May 27, 2009:

(1) 40 CFR 60.250(a) and (d)
(2) 40 CFR 60.251
(3) 40 CFR 60.254(b) and (c)
(4) 40 CFR 60.255(b) through (h)
(5) 40 CFR 60.256(b) and (c)
(6) 40 CFR 60.257
(7) 40 CFR 60.258

D.2.6 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for the equipment and activities associated with the coal preparation and processing plant listed under item (c) of this section facility description box and their associated control devices. Section B – Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance Plan required by this condition.

Compliance Determination Requirements

D.2.7 Fugitive Particulate Matter Control

In order to demonstrate compliance with Conditions C.3, C.6, D.2.1(a), D.2.1(b), D.2.1(c), and D.2.3, the Permittee shall control fugitive particulate matter emissions according to the Fugitive Dust Control Plan.

D.2.8 Coal Moisture Content and Particulate Control

The Permittee shall use wet suppression as necessary to ensure compliance with Conditions C.3, C.6, D.2.1(d), D.2.1(e), D.2.2, and D.2.3. If weather conditions preclude the use of wet suppression, the Permittee shall perform a moisture content analysis of the coal to verify that the moisture content is equal to or greater than the moisture content limitations specified in D.2.1(d) and D.2.1(e). The method for the moisture content analysis shall be approved by IDEM, OAQ.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.2.9 Visible Emissions Notations

(a) Visible emission notations of the process emission points for the equipment and activities associated with the coal preparation and processing plant listed under item (c) of this section facility description box shall be performed once per week during normal daylight operations. 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 a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.2.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.8, the Permittee shall maintain records of coal moisture content analyses, when moisture content analyses are performed.

(b) To document the compliance status with Condition D.2.9, the Permittee shall maintain records of the visible emission notations of the process emission points for the equipment and activities associated with the coal preparation and processing plant listed under item (c) of this section facility description box. The Permittee shall include in its records when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g., the process did not operate that day).

(c) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Peabody Midwest Mining LLC - Bear Run Mine
Address:	7255 East CR 600 South
City:	Carlisle, Indiana 47838
Phone #:	812-434-8573
MSOP #:	M153-28491-00011

I hereby certify that Peabody Midwest Mining LLC - Bear Run Mine is :

□ still in operation.

□ no longer in operation.

I hereby certify that Peabody Midwest Mining LLC - Bear Run Mine is :

□ in compliance with the requirements of MSOP M153-28491-00011.

□ not in compliance with the requirements of MSOP M153-28491-00011.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____
_____

Attachment A
to MSOP No. M153-28491-00011

FUGITIVE DUST CONTROL PLAN

PEABODY MIDWEST MINING, LLC – BEAR RUN MINE
FACILITY AND NEW NSPS SUBPART Y COAL STOCKPILE
FUGITIVE DUST CONTROL PLAN

SOURCE INFORMATION

FACILITY	**Bear Run Mine**	**DATE** **February 25, 2010** **Revised September 23, 2010**
PHYSICAL ADDRESS	**STREET** **7255 East CR 600 South**	**PHONE NO.** **812-659-7100**
	CITY, STATE **Carlisle, IN**	**ZIP CODE** **47838**
CONTACT PERSON	**NAME** **Forrest Crowe**	
	TITLE **Environmental Specialist**	
	PHONE NO. **812-659-3393**	

TYPE OF FACILITY *(check all that apply)*

X	**surface mine**	X	**coal loading facility ***
	underground mine	X	**coal preparation plant ***

***** under construction or activity pending

Note that coal mining is a dynamic process. Activities and areas of activity are subject to change. This plan includes current and planned future operations. _____

FACILITY FUGITIVE DUST MANAGEMENT PLAN

Applicability: from 326 IAC 6-5-1 (Indiana) for sources of fugitive emissions
(b) Any new source of fugitive particulate matter emissions, located anywhere in the state, requiring a permit as set forth in 326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1985.

Activities *(check all that apply)*

X	**overburden drilling and blasting**	X	**unpaved haul roads**
X	**overburden and topsoil removal/replacement**	X	**unpaved access roads and parking lots**
X	**transport of coal**	X	**coal stockpiles**
X	**screening of coal ***	X	**refuse stockpiles ***
X	**crushing/breaking of coal ***	X	**refuse disposal ***
X	**transport of refuse material ***	X	**conveying and transfer of coal ***
X	**haulage vehicles**	X	**conveying and transfer of refuse ***

***** under construction or activity pending

FUGITIVE DUST MANAGEMENT PLAN FOR NEW NSPS SUBPART Y FOR COAL STOCKPILES

Applicability: from 40 CFR 60 Part Subpart Y (Federal) for Coal Processing and Processing Plants
A fugitive coal dust emissions control plan is required for open storage piles, which include the equipment used in the loading, unloading and conveying operations of the affected facility, constructed, reconstructed or modified after May 27, 2009. The owner or operator is required to prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions.

Activities *(check all that apply)*

X	**open coal storage piles ***
X	**open refuse storage piles ***

***** under construction or activity pending

BEST MANAGEMENT PRACTICES: FUGITIVE DUST CONTROL MEASURES

Best Management Practices (BMPs) have been developed for the following potential fugitive dust generating sources:

- stockpiles
- paved public roadways
- unpaved haul roads
- conveyor transfer points and screening operations
- crushers and breakers
- overburden drilling and blasting
- overburden and topsoil removal/replacement
- refuse disposal

(Refer to Glossary for definitions of terms used within this document.)

Coal and Refuse Stockpiles
Fugitive dust control methods for stockpiles to be used as needed include:
- Manage the height of the stockpiles;
- Manage the disturbance of the stockpiles; and
- Apply water* to the surface of the stockpile.

Paved Public Roadways
Control methods for trackout on to paved roads to be used as needed include:
- Promptly remove mud, dirt, or similar debris from the paved road;
- Apply gravel to the surface of the adjacent unpaved haul road. Make sure the area of application is sufficient to control track out.

Unpaved Haul Roads, Access Roads and Parking Lots
Fugitive dust control methods for unpaved haul roads to be used as needed include:
- Manage vehicle traffic on unpaved haul roads to authorized vehicles only;
- Manage vehicle speeds on unpaved haul roads;
- Apply water* to the surface of the unpaved haul road.

Conveyor Transfer Points and Screening Operations
Fugitive dust control methods for conveyor transfer points and screening operations to be used as needed include:
- Manage drop heights of materials to assure a homogeneous flow of material; and
- Install, operate, and maintain water* spray bars to control emissions as necessary.

Coal Crushers and Breakers
Fugitive dust control methods for coal crushers to be used as needed include:
- Manage drop heights of coal to assure a homogeneous flow; and
- Install, operate, and maintain water* spray bars to control fugitive dust emissions at crusher drop points as necessary.

Overburden Drilling and Blasting
Fugitive dust control methods for overburden drilling and blasting to be used as needed include:
- Overburden drilling activity occurs on a rock bench below grade, limiting fugitive dust; and
- Monitoring of wind speed and direction and adjustment of operating activities accordingly.

Overburden and Topsoil Removal/replacement
Fugitive dust control methods for overburden and topsoil removal/replacement to be used as needed include:
- Stabilization and/or protection of soil with vegetation and/or mulch; and
- Monitoring of wind speed and direction and adjustment of operating activities accordingly.

Refuse Disposal
Fugitive dust control methods for refuse disposal to be used as needed include:
- The moisture content of refuse material is sufficiently high to control generation of fugitive dust; and
- Refuse material is disposed of below grade in excavated pits and/or in water* impoundments.

Note that acceptable dust control additives may be mixed with water to enhance dust control (see attached product MSDS information). The application of this product will be in the immediate vicinity of the coal preparation plant and coal handling areas. There are no known site-specific impacts associated with the use of this product.

GLOSSARY OF TERMS: FUGITIVE DUST CONTROL

Best Management Practice (BMP)
A recommended technique designed to assist industries to comply with environmental regulations.

Crushing/breaking operation
The primary reduction and separation of a material for sizing and cleaning purposes.

Fugitive dust
Fugitive emissions composed of particulate matter.

Fugitive emissions
Emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Overburden
Unconsolidated and consolidated material overlying the resource being mined.

Particulate matter
Any material, except water in uncombined form, which exists as a liquid or a solid at standard conditions.

Paved public roadway
A roadway with a surface of asphalt or concrete that is accessible to the general public.

Refuse
Waste material separated during the cleaning process from the resource being mined.

Screening operation
The separation of material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the surfaces.

Stockpile
Any storage pile, reserve supply, or similar accumulation.

Trackout
The deposition of mud, dirt, or similar debris onto the surface of a paved road from tires and/or undercarriage of any vehicle associated with the operations of a facility.

Transfer
A point in a conveying operation where the material is transferred to or from a belt conveyor.

Truck dumping
The unloading of materials from movable vehicles designed to transport the material from one location to another. Movable vehicles include, but are not limited to, trucks, front-end loaders, and railcars.

Unpaved haul road
An unsurfaced roadway within the facility boundary that is used as a haul road, access road, or similar means of ingress or egress.

Self-inspection Checklist

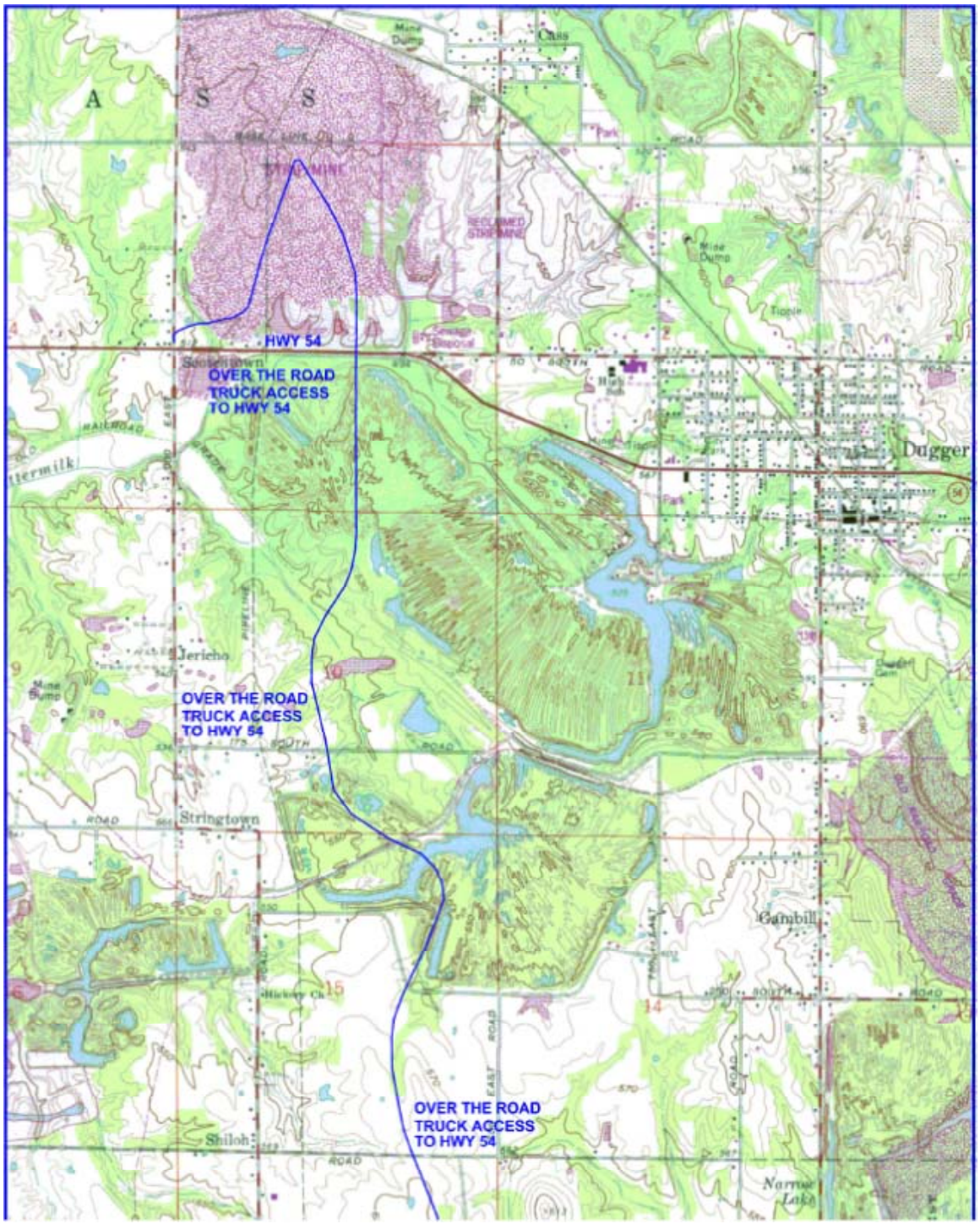
Use a self-inspection checklist to help incorporate the routine tasks of fugitive dust control into your daily schedule. The checklist serves as a job reminder and as a record of your efforts to keep dust problems to a minimum. You can identify problem areas before they get out of hand, and anticipate adjustments for seasonal changes or unforeseen circumstances.

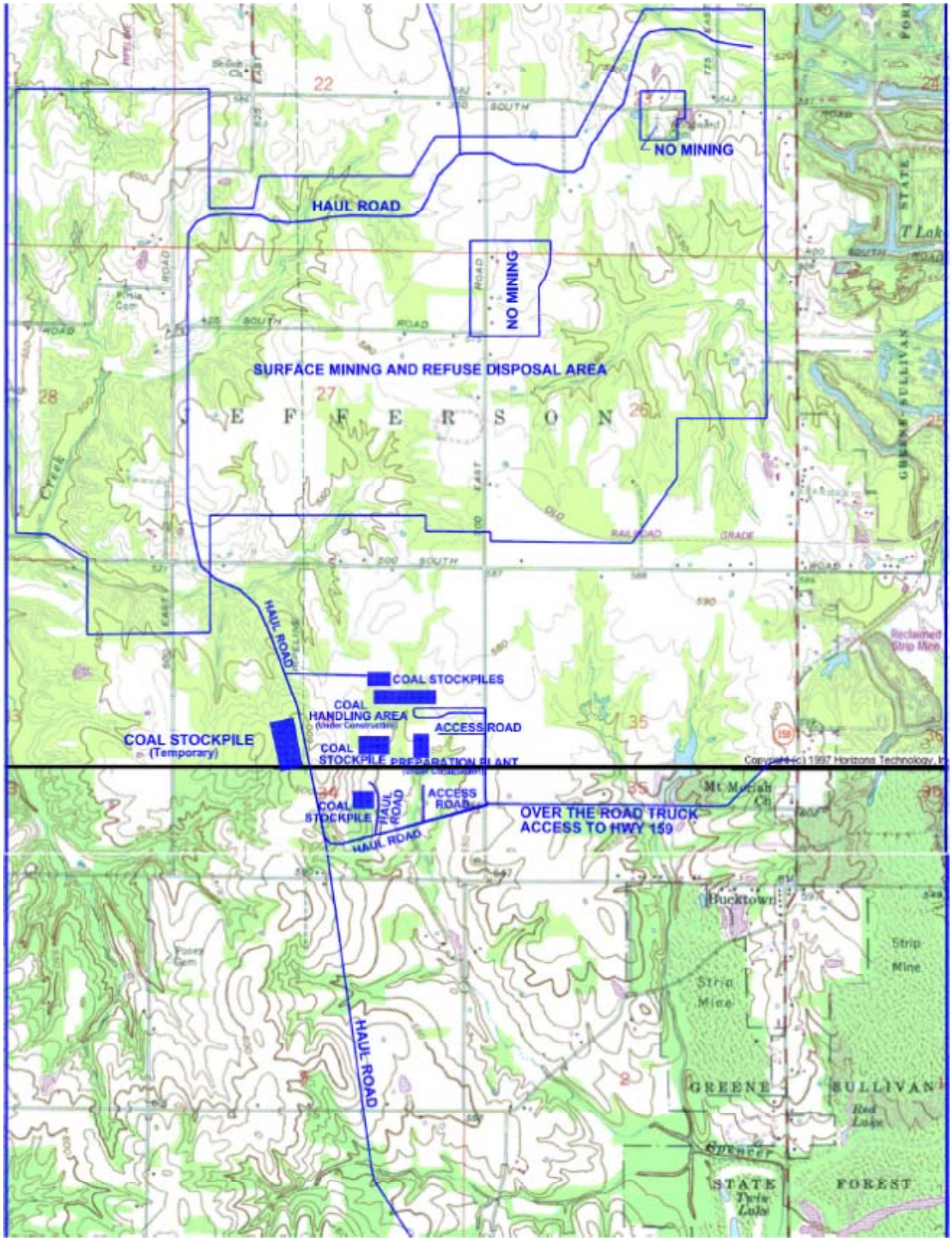
Self-Inspection Checklist: Weather Log

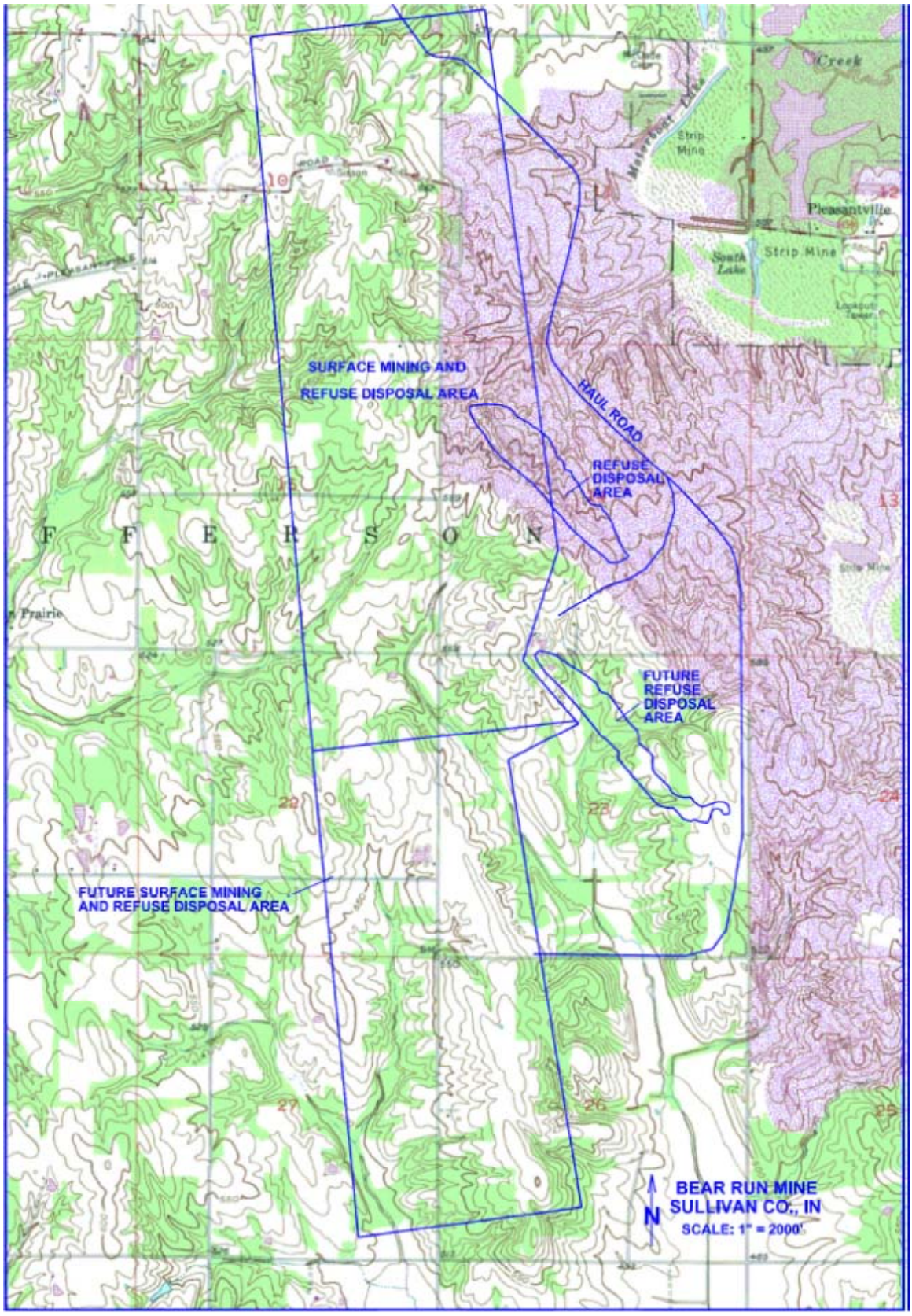
Date/Time	Temperature (°F)		Wind Speed	Wind Direction	Precipitation (in.)	Comments
	Low	High				

Self-Inspection Checklist: Fugitive Dust Control Method Log

Date	Control Activity	Comments


HWY 54
OVER THE ROAD
TRUCK ACCESS
TO HWY 54
OVER THE ROAD
TRUCK ACCESS
TO HWY 54
OVER THE ROAD
TRUCK ACCESS
TO HWY 54
Jericho
Stringtown
Shiloh
Gambill
Dugger


NO MINING
HAUL ROAD
NO MINING
SURFACE MINING AND REFUSE DISPOSAL AREA
HAUL ROAD
COAL STOCKPILES
COAL HANDLING AREA
ACCESS ROAD
COAL STOCKPILE
(Temporary)
COAL STOCKPILE
PREPARATION PLANT
COAL STOCKPILE
HAUL ROAD
ACCESS ROAD
HAUL ROAD
OVER THE ROAD TRUCK ACCESS TO HWY 159
HAUL ROAD
GREENE
SULLIVAN
STATE FOREST


SURFACE MINING AND
REFUSE DISPOSAL AREA
HAUL ROAD
REFUSE
DISPOSAL
AREA
FUTURE
REFUSE
DISPOSAL
AREA
FUTURE SURFACE MINING
AND REFUSE DISPOSAL AREA
Strip
Mine
Pleasantville
South
Lake
Strip Mine
F E R S O N
Prairie
BEAR RUN MINE
SULLIVAN CO., IN
SCALE: 1" = 2000'
N

Freedom INDUSTRIES

DC-105

MATERIAL SAFETY DATA SHEET

Preparation date: June 26, 2008
Page 1 of 6

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS REVISION #: 003

PRODUCT NAME: DC-105

USE: Dust control

DISTRIBUTED BY: Freedom Industries, Inc.
1015 Barlow Drive
Charleston, WV 25311

PHONE NUMBERS: Business - (304) 720-8065
ChemTrec - (800) 424-9300

SECTION 2 - HAZARDS IDENTIFICATION

********** EMERGENCY OVERVIEW **********

Caution! Product is a dark brown liquid with a sweet odor. The material can cause skin and eye irritation. Avoid contact with skin, eyes and clothing. Wear protective goggles and gloves when handling this product. Wash thoroughly after handling.

****

This product is considered hazardous under the OSHA HazCom Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

LIKELY ROUTES OF EXPOSURE:
Eye and skin contact

EYES:
Can cause irritation.

SKIN:
Prolonged or repeated contact may cause mild irritation. Persons with pre-existing skin conditions are particularly susceptible.

INGESTION (swallowing):
May cause mild irritation, nausea, vomiting and diarrhea.

Section 2 continued on next page

Freedom INDUSTRIES

DC-105

MATERIAL SAFETY DATA SHEET

Preparation date: June 26, 2008
Page 2 of 6

SECTION 2 - HAZARDS IDENTIFICATION (continued)

INHALATION (breathing):
Spray or mist can cause irritation to the nose, throat and lungs.

CHRONIC EFFECTS/CARCINOGENICITY:
This product (or component) is not listed in IARC Monographs, the NTP Eleventh Report on Carcinogens or the ACGIH TLVs as a carcinogen or potential carcinogen. OSHA does not regulate it as a carcinogen.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Component	%	CAS#
Surfactant blend	20-40	Proprietary
Water	60-80	7732-18-5

SECTION 4 - FIRST AID MEASURES

EYE CONTACT:
Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get medical attention.

SKIN CONTACT:
Wash exposed area with soap and water. Remove contaminated clothing and launder before reuse.

INGESTION (swallowing):
Immediately drink two large glasses of water. Call a physician.

INHALATION (breathing):
If affected, move to fresh air.

Freedom INDUSTRIES

DC-105

MATERIAL SAFETY DATA SHEET

Preparation date: June 26, 2008
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SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Product contains a large amount of water, and would not normally burn.

EXTINGUISHING MEDIA:

Use water fog, alcohol foam, dry chemical or carbon dioxide as appropriate for the other materials involved in the fire.

PROTECTION OF FIREFIGHTERS:

Keep personnel removed from and upwind. Wear full protective clothing and self-contained breathing apparatus with full face-piece. Combustion products include carbon monoxide and carbon dioxide.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Persons not wearing protective equipment should be excluded from the area of the spill until clean up has been completed. Dike area of spill to prevent spreading and pump liquid to salvage tank. Absorb remaining liquid on vermiculite, floor absorbent or other absorbent material and shovel into containers.

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

STORAGE:

Keep in closed or covered containers when not in use. Store in cool dry place with adequate ventilation.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

None established for product or components.

Section 8 continued on next page

Freedom INDUSTRIES

DC-105

MATERIAL SAFETY DATA SHEET

Preparation date: June 26, 2008
Page 4 of 6

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

ENGINEERING CONTROLS:
Not required under normal conditions of use.

EYE / FACE PROTECTION:
Chemical splash goggles in compliance with OSHA regulations are advised.

SKIN PROTECTION:
Wear protective gloves such as Neoprene or Buna-N.

RESPIRATORY PROTECTION:
Not required under normal conditions of use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark brown liquid @ 68° F (20° C)
Odor: Sweet
Specific Gravity: ~1.08 @ 77° F (25° C)
Evaporation Rate: Slower (Ethyl Ether = 1)
Solubility in Water: Dispersible
Initial Boiling Point: >212° F (100° C)
Vapor Pressure: 17.5 @ 68° F (20° C) (water)
Volatile %: 60-80
pH: Unavailable
Flash Point: >212° F (100° C)
Upper Explosion Limit: Unavailable
Lower Explosion Limit: Unavailable
Autoignition Temperature: Unavailable

SECTION 10 - STABILITY AND REACTIVITY

STABILITY (conditions to avoid):
Stable under normal conditions of 70° F (21° C) and 14.7 psig (760 mm Hg).

INCOMPATIBILITIES (materials to avoid):
Avoid contact with strong oxidizing agents and strong mineral acids.

DECOMPOSITION:
Unavailable

HAZARDOUS POLYMERIZATION:
Not known to occur

Freedom INDUSTRIES

DC-105

MATERIAL SAFETY DATA SHEET

Preparation date: June 26, 2008
Page 5 of 6

SECTION 11 - TOXICOLOGICAL INFORMATION

No data available for product

SECTION 12 - ECOLOGICAL INFORMATION

No data available for product

SECTION 13 - DISPOSAL CONSIDERATIONS

Material that cannot be recovered or reused should be sent to a licensed disposal facility for drying and disposal in a landfill. Material collected on absorbent material may be deposited in a landfill in accordance with all applicable local, state and federal regulations.

This product, if disposed of, is not considered a hazardous waste under current RCRA definitions.

SECTION 14 - TRANSPORT INFORMATION

Not regulated under current U.S DOT, TDG (Canadian), ICAO (air) or IMO (water) transport regulations.

SECTION 15 - REGULATORY INFORMATION

TSCA INFORMATION:

All components in this product are in compliance with TSCA Inventory requirements.

SARA 313 INFORMATION:

SARA requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372. This information must be included in all MSDS that are copied and distributed for this material.

Components present in this product at a level that could require reporting under the statute are: None

Freedom INDUSTRIES

DC-105

MATERIAL SAFETY DATA SHEET

Preparation date: June 26, 2008
Page 6 of 6

SECTION 16 - OTHER INFORMATION

HAZARD RATING:

HEALTH	1	0 - LEAST
FIRE	0	1 - SLIGHT
REACTIVITY	0	2 - MODERATE
OTHER	-	3 - HIGH
		4 - EXTREME

HAZARD RATING METHOD: NFPA

REASON FOR REVISION:
Reviewed and updated to new ANSI format

The product information contained herein is believed to be accurate as of the date of the Material Safety Data Sheet, and is provided without warranty, expressed or implied, as to the results of use of this information or the product to which it relates. Recipient assumes all responsibility for the use of this information and the use (alone or in combination with any other product), storage or disposal of the product, including any resultant personal injury or property damage.

END OF REPORT

Page 1 of 4
Revision date 06/18/2009
Print date 6/24/2009

ZINKAN ENTERPRISES INCORPORATED

MATERIAL SAFETY DATA SHEET

1. Identification of the Product and the Company

DT 10

Zinkan Enterprises, Inc.

1919 Case Parkway North

Twinsburg, Ohio 44087

Tel: 1-800-229-6801 Fax: 1-330-425-8202

Emergency Contact: Infotrac 1-800-535-5053

2. Composition/ Information On Ingredients

Components	CAS Number	OSHA/PEL	ACGIH/TLV	Weight

3. Hazards Identification

Spills will produce slippery surfaces

4. First Aid Measures

Inhalation: Not applicable

Skin Contact: Wash off immediately with soap and plenty of water Remove contaminated clothing.

Eye Contact: Rinse thoroughly with plenty of water. In case of persistent eye irritation, consult a physician.

Ingestion: Do not induce vomiting Give 2-4 cups of water and get medical attention.

5. Fire-Fighting Measures

Suitable extinguishing media: Base selection on source of fire

Special fire-fighting precautions: None.

Protective equipment for firefighters: Self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures

Personal precautions: No special precautions required

Environmental precautions: Flush small spills with water. Recover large spills with absorbent material.

Methods for cleaning up: Flush with water Soak up with inert absorbent material.

DT 10

Page 2 of 4
Revision date 06/18/2009
Print date 6/24/2009

7. Handling and Storage

Handling: Avoid contact with skin and eyes. Ensure there is adequate ventilation. Do not smoke

Storage: Keep container closed when not in use Make sure there is adequate ventilation Protect from freezing

8. Exposure Controls/ Personal Protection

Engineering controls: Use local exhaust if misting occurs Natural ventilation is adequate in absence of mists

Personal Protection Equipment

Respiratory Protection: Not required.

Hand Protection: Rubber gloves.

Eye Protection: Safety glasses with side-shields Do not wear contact lenses

Skin Protection: Chemical resistant apron or suit if splashing of solution is likely.

Hygiene Measures: Wash hands before breaks and immediately after handling product. Handle in accordance with good industrial hygiene and safety practice

9. Physical and Chemical Properties

Form: Liquid

Color: Light yellow hazy

Odor: Slight odor

Specific Gravity: 1.016-1.024

Melting Point (°C): Not applicable

Flash Point (°C): Does not flash

Autoignition Temperature (°C): Does not ignite

Vapor Pressure (mm Hg): Same as water

Water Solubility: Complete

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10. Stability and Reactivity

Stability: Product is stable, no hazardous polymerization will occur Oxidizing agents may cause exothermic reactions

Hazardous Decomposition products: Thermal decomposition may produce: carbon oxides, nitrogen oxides (NOx) and sulfur

11. Toxicological Information

Acute Toxicity

Oral/Dermal/Inhalation: None available on this product

Irritation

Skin: May cause skin irritation with susceptible persons

Eyes: May cause eye irritation with susceptible persons

Sensitization: The product is not expected to be sensitizing

Chronic Toxicity: Prolonged skin contact may produce dermatitis

12. Ecological Information

Fish: Not available

Persistence/ Degradability: Readily biodegradable

13. Disposal Considerations

Waste from residues/ Unused products: In accordance with federal, state and local regulations

Contaminated Packaging: Rinse empty containers with water and use the rinse water to prepare the working solution Can be landfilled or incinerated, when in compliance with local regulations

14. Transport Information

Coal treating compound. Not regulated by DOT

NMFC: 50130 03

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15. Regulatory Information

All components of this product are on the TSCA and DSL inventories.

RCRA status:	Not a hazardous waste
Hazardous waste number:	Not applicable.
Reportable Quantity:	Not applicable.
Threshold Planning quantity:	Not applicable.
Health & Safety Reporting List	None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules	None of the chemicals in this product are under a Chemical Test Rule.
CERCLA Hazardous Substance:	Not applicable.
TSCA Significant New Use Rule	None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)	None of the chemicals in this material have an RQ
Section 302 (TPQ)	None of the chemicals in this product have a TPQ.
Section 313	No chemicals are reportable under Section 313.
Clean Air Act:	This material does not contain any hazardous air pollutants This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors

HMIS & NFPA Ratings	HMIS	NFPA
Health:	0	0
Flammability:	0	0
Reactivity:	0	0
Personal Protection:	A	

16. Other Information

Person to contact: **Regulatory Affairs Manager**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

Attachment B
to MSOP No. M153-28491-00011

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

Source: 74 FR 51977, Oct. 8, 2009, unless otherwise noted.

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in §60.251, §60.252(a), §60.253(a), §60.254(a), §60.255(a), and §60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(c) The provisions in §60.251, §60.252(b)(1) and (c), §60.253(b), §60.254(b), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after April 28, 2008, and on or before May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(d) The provisions in §60.251, §60.252(b)(1) through (3), and (c), §60.253(b), §60.254(b) and (c), §60.255(b) through (h), §60.256(b) and (c), §60.257, and §60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, transfer and loading systems, and open storage piles.

§ 60.251 Definitions.

As used in this subpart, all terms not defined herein have the meaning given them in the Clean Air Act (Act) and in subpart A of this part.

(a) *Anthracite* means coal that is classified as anthracite according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(b) *Bag leak detection system* means a system that is capable of continuously monitoring relative particulate matter (dust loadings) in the exhaust of a fabric filter to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

(c) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM D388 (incorporated by reference— *see* §60.17).

(d) *Coal* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* §60.17).

(2) For units constructed, reconstructed, or modified after May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference— *see* §60.17), and coal refuse.

(e) *Coal preparation and processing plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(f) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts. Equipment located at the mine face is not considered to be part of the coal preparation and processing plant.

(g) *Coal refuse* means waste products of coal mining, physical coal cleaning, and coal preparation operations (*e.g.* culm, gob, *etc.*) containing coal, matrix material, clay, and other organic and inorganic material.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Design controlled potential PM emissions rate* means the theoretical particulate matter (PM) emissions (Mg) that would result from the operation of a control device at its design emissions rate (grams per dry standard cubic meter (g/dscm)), multiplied by the maximum design flow rate (dry standard cubic meter per minute (dscm/min)), multiplied by 60 (minutes per hour (min/hr)), multiplied by 8,760 (hours per year (hr/yr)), divided by 1,000,000 (megagrams per gram (Mg/g)).

(j) *Indirect thermal dryer* means a thermal dryer that reduces the moisture content of coal through indirect heating of the coal through contact with a heat transfer medium. If the source of heat (the source of combustion or furnace) is subject to another subpart of this part, then the furnace and the associated emissions are not part of the affected facility. However, if the source of heat is not subject to another subpart of this part, then the furnace and the associated emissions are part of the affected facility.

(k) *Lignite* means coal that is classified as lignite A or B according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(l) *Mechanical vent* means any vent that uses a powered mechanical drive (machine) to induce air flow.

(m) *Open storage pile* means any facility, including storage area, that is not enclosed that is used to store coal, including the equipment used in the loading, unloading, and conveying operations of the facility.

(n) *Operating day* means a 24-hour period between 12 midnight and the following midnight during which coal is prepared or processed at any time by the affected facility. It is not necessary that coal be prepared or processed the entire 24-hour period.

(o) *Pneumatic coal-cleaning equipment* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility which classifies coal by size or separates coal from refuse by application of air stream(s).

(p) *Potential combustion concentration* means the theoretical emissions (nanograms per joule (ng/J) or pounds per million British thermal units (lb/MMBtu) heat input) that would result from combustion of a fuel

in an uncleaned state without emission control systems, as determined using Method 19 of appendix A–7 of this part.

(q) *Subbituminous coal* means coal that is classified as subbituminous A, B, or C according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, *see* §60.17).

(r) *Thermal dryer* means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(2) For units constructed, reconstructed, or modified after May 27, 2009, any facility in which the moisture content of coal is reduced by either contact with a heated gas stream which is exhausted to the atmosphere or through indirect heating of the coal through contact with a heated heat transfer medium.

(s) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

§ 60.252 Standards for thermal dryers.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008, subject to the provisions of this subpart must meet the requirements in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)); and

(2) The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater.

(b) Except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after April 28, 2008, subject to the provisions of this subpart must meet the applicable standards for PM and opacity, as specified in paragraph (b)(1) of this section. In addition, and except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after May 29, 2009, subject to the provisions of this subpart must also meet the applicable standards for sulfur dioxide (SO_2), and combined nitrogen oxides (NO_X) and carbon monoxide (CO) as specified in paragraphs (b)(2) and (b)(3) of this section.

(1) The owner or operator must meet the requirements for PM emissions in paragraphs (b)(1)(i) through (iii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed or reconstructed after April 28, 2008, the owner or operator must meet the requirements of (b)(1)(i)(A) and (b)(1)(i)(B).

(A) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that contain PM in excess of 0.023 g/dscm (0.010 grains per dry standard cubic feet (gr/dscf)); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that exhibit 10 percent opacity or greater.

(ii) For each thermal dryer modified after April 28, 2008, the owner or operator must meet the requirements of paragraphs (b)(1)(ii)(A) and (b)(1)(ii)(B) of this section.

(A) The owner or operator must not cause to be discharged to the atmosphere from the affected facility any gases which contain PM in excess of 0.070 g/dscm (0.031 gr/dscf); and

(B) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 20 percent opacity or greater.

(2) Except as provided in paragraph (b)(2)(iii) of this section, for each thermal dryer constructed, reconstructed, or modified after May 27, 2009, the owner or operator must meet the requirements for SO_2emissions in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.

(i) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that contain SO_2in excess of 85 ng/J (0.20 lb/MMBtu) heat input; or

(ii) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that either contain SO_2in excess of 520 ng/J (1.20 lb/MMBtu) heat input or contain SO_2in excess of 10 percent of the potential combustion concentration (*i.e.,* the facility must achieve at least a 90 percent reduction of the potential combustion concentration and may not exceed a maximum emissions rate of 1.2 lb/MMBtu (520 ng/J)).

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to an SO_2limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input are not subject to the SO_2limits of this section.

(3) Except as provided in paragraph (b)(3)(iii) of this section, the owner or operator must meet the requirements for combined $NO_X$and CO emissions in paragraph (b)(3)(i) or (b)(3)(ii) of this section, as applicable to the affected facility.

(i) For each thermal dryer constructed after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain a combined concentration of $NO_X$and CO in excess of 280 ng/J (0.65 lb/MMBtu) heat input.

(ii) For each thermal dryer reconstructed or modified after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain combined concentration of $NO_X$and CO in excess of 430 ng/J (1.0 lb/MMBtu) heat input.

(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to a NO_Xlimit and/or CO limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input, are not subject to the combined $NO_X$and CO limits of this section.

(c) Thermal dryers receiving all of their thermal input from an affected facility covered under another 40 CFR Part 60 subpart must meet the applicable requirements in that subpart but are not subject to the requirements in this subpart.

§ 60.253 Standards for pneumatic coal-cleaning equipment.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified on or before April 28, 2008, must meet the requirements of paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess of 0.040 g/dscm (0.017 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit 10 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) and (b)(2) of this section.

(1) The owner of operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess or 0.023 g/dscm (0.010 gr/dscf); and

(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit greater than 5 percent opacity.

§ 60.254 Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.

(a) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of this section, as applicable to the affected facility.

(1) Except as provided in paragraph (b)(3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).

(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of this section.

(c) The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions

control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of this section.

(1) The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

(2) For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of this section are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

(3) Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of this section as specified in paragraphs (c)(3)(i) through (iv) of this section.

(i) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of this section.

(ii) The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).

(iii) While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of this section while the petition is pending.

(iv) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(4) The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs (c)(4)(i) and (c)(4)(ii) of this section.

(i) The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.

(ii) The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate

pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph (c)(5) of this section.

(5) The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) and (c)(5)(ii) of this section.

(i) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(ii) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of this section, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.

(6) Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

§ 60.255 Performance tests and other compliance requirements.

(a) An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257.

(b) An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraphs (b)(1) and (2) of this section.

(1) For each affected facility subject to a PM, SO_2, or combined $NO_X$and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according the requirements in paragraphs (b)(1)(i) through (iii) of this section, as applicable.

(i) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(ii) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.

(2) For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of this section, as applicable, except as provided for in paragraphs (e)

and (f) of this section. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of this section.

(i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.

(ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

(iii) An owner or operator of an affected facility continuously monitoring scrubber parameters as specified in §60.256(b)(2) is exempt from the requirements in paragraphs (b)(2)(i) and (ii) if opacity performance tests are conducted concurrently with (or within a 60-minute period of) PM performance tests.

(c) If any affected coal processing and conveying equipment (*e.g.,* breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in *§* 60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.

(d) An owner or operator of an affected facility (other than a thermal dryer) that commenced construction, reconstruction, or modification after April 28, 2008, is subject to a PM emission standard and uses a control device with a design controlled potential PM emissions rate of 1.0 Mg (1.1 tons) per year or less is exempted from the requirements of paragraphs (b)(1)(i) and (ii) of this section provided that the owner or operator meets all of the conditions specified in paragraphs (d)(1) through (3) of this section. This exemption does not apply to thermal dryers.

(1) PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,

(2) The control device manufacturer's recommended maintenance procedures are followed, and

(3) All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in paragraphs (e) or (f) of this section are followed.

(e) For an owner or operator of a group of up to five of the same type of affected facilities that commenced construction, reconstruction, or modification after April 28, 2008, that are subject to PM emissions standards and use identical control devices, the Administrator or delegated authority may allow the owner or operator to use a single PM performance test for one of the affected control devices to demonstrate that the group of affected facilities is in compliance with the applicable emissions standards provided that the owner or operator meets all of the conditions specified in paragraphs (e)(1) through (3) of this section.

(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;

(2) The manufacturer's recommended maintenance procedures are followed for each control device; and

(3) A performance test is conducted on each affected facility at least once every 5 calendar years.

(f) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of this section.

(1) Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.

(i) Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A–7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A–4 of this part, performance test must be conducted within 45 operating days.

(ii) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(iii) Conduct a performance test using Method 9 of appendix A–4 of this part at least once every 5 calendar years for each affected facility.

(2) Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administrator or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, *see* OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator or delegated authority shall be implemented by the owner or operator.

(g) As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (g)(1) and (2) of this section.

(1) The COMS must meet Performance Specification 1 in 40 CFR part 60, appendix B.

(2) The COMS must comply with the quality assurance requirements in paragraphs (g)(2)(i) through (v) of this section.

(i) The owner or operator must automatically (intrinsic to the opacity monitor) check the zero and upscale (span) calibration drifts at least once daily. For particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of Performance Specification 1 in 40 CFR part 60, appendix B.

(ii) The owner or operator must adjust the zero and span whenever the 24-hour zero drift or 24-hour span drift exceeds 4 percent opacity. The COMS must allow for the amount of excess zero and span drift

measured at the 24-hour interval checks to be recorded and quantified. The optical surfaces exposed to the effluent gases must be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments. For systems using automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(iii) The owner or operator must apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied must provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.

(iv) Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS must be in continuous operation and must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(v) The owner or operator must reduce all data from the COMS to 6-minute averages. Six-minute opacity averages must be calculated from 36 or more data points equally spaced over each 6-minute period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments must not be included in the data averages. An arithmetic or integrated average of all data may be used.

(h) The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in paragraphs (h)(1) through (3) of this section.

(1) Conduct an initial performance test using Method 9 of appendix A–4 of this part according to the requirements in paragraphs (h)(1)(i) and(ii).

(i) Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position.

(ii) Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events.

(2) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.

(3) Conduct a performance test using Method 9 of appendix A–4 of this part at least once every 5 calendar years for each affected facility.

§ 60.256 Continuous monitoring requirements.

(a) The owner or operator of each affected facility constructed, reconstructed, or modified on or before April 28, 2008, must meet the monitoring requirements specified in paragraphs (a)(1) and (2) of this section, as applicable to the affected facility.

(1) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(i) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

(ii) For affected facilities that use wet scrubber emission control equipment:

(A) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(B) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator shall have discretion to grant requests for approval of alternative monitoring locations.

(2) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

(b) The owner or operator of each affected facility constructed, reconstructed, or modified after April 28, 2008, that has one or more mechanical vents must install, calibrate, maintain, and continuously operate the monitoring devices specified in paragraphs (b)(1) through (3) of this section, as applicable to the mechanical vent and any control device installed on the vent.

(1) For mechanical vents with fabric filters (baghouses) with design controlled potential PM emissions rates of 25 Mg (28 tons) per year or more, a bag leak detection system according to the requirements in paragraph (c) of this section.

(2) For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs (b)(2)(i) through (iv) of this section.

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply flow rate.

(iii) A monitoring device for the continuous measurement of the pH of the wet scrubber liquid. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design pH.

(iv) An average value for each monitoring parameter must be determined during each performance test. Each monitoring parameter must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(3) For mechanical vents with control equipment other than wet scrubbers, a monitoring device for the continuous measurement of the reagent injection flow rate to the control equipment, as applicable. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design injection flow rate. An average reagent injection flow rate value must be determined during each performance test. The reagent injection flow rate must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.

(c) Each bag leak detection system used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (c)(1) through (3) of this section.

(1) The bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (mg/dscm) (0.00044 grains per actual cubic foot (gr/acf)) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.,* using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (c)(2)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (c)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The owner or operator must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. This plan must be submitted to the Administrator or delegated authority 30 days prior to startup of the affected facility. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (c)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow the owner and operator more

than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

§ 60.257 Test methods and procedures.

(a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

(1) Method 9 of appendix A–4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).

(i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).

(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

(b) The owner or operator must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emissions standards specified in §60.252 according to the requirements in §60.8 using the applicable test methods and procedures in paragraphs (b)(1) through (8) of this section.

(1) Method 1 or 1A of appendix A–4 of this part shall be used to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(2) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A–4 of this part shall be used to determine the volumetric flow rate of the stack gas.

(3) Method 3, 3A, or 3B of appendix A–4 of this part shall be used to determine the dry molecular weight of the stack gas. The owner or operator may use ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses (incorporated by reference— *see* §60.17) as an alternative to Method 3B of appendix A–2 of this part.

(4) Method 4 of appendix A–4 of this part shall be used to determine the moisture content of the stack gas.

(5) Method 5, 5B or 5D of appendix A–4 of this part or Method 17 of appendix A–7 of this part shall be used to determine the PM concentration as follows:

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin. A minimum of three valid test runs are needed to comprise a PM performance test.

(ii) Method 5 of appendix A of this part shall be used only to test emissions from affected facilities without wet flue gas desulfurization (FGD) systems.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(iv) Method 5D of appendix A–4 of this part shall be used for positive pressure fabric filters and other similar applications (*e.g.,* stub stacks and roof vents).

(v) Method 17 of appendix A–6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A–3 of this part may be used in Method 17 of appendix A–6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A–6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(6) Method 6, 6A, or 6C of appendix A–4 of this part shall be used to determine the SO_2concentration. A minimum of three valid test runs are needed to comprise an SO_2performance test.

(7) Method 7 or 7E of appendix A–4 of this part shall be used to determine the NO_Xconcentration. A minimum of three valid test runs are needed to comprise an NO_Xperformance test.

(8) Method 10 of appendix A–4 of this part shall be used to determine the CO concentration. A minimum of three valid test runs are needed to comprise a CO performance test. CO performance tests are conducted concurrently (or within a 60-minute period) with NO_Xperformance tests.

§ 60.258 Reporting and recordkeeping.

(a) The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:

(1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.

(2) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.

(3) The amount and type of coal processed each calendar month.

(4) The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.

(5) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.

(6) Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, *e.g.* objections, to the plan and any actions relative to the alternative control measures, *e.g.* approvals, shall be noted in the logbook as well.

(7) For each bag leak detection system, the owner or operator must keep the records specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(8) A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.

(9) During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.

(10) During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.

(b) For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:

(1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.

(2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.

(3) All 6-minute average opacities that exceed the applicable standard.

(c) The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The owner or operator electing to comply with section 60.255(d) shall also include information which demonstrates that the control devices are identical.

(d) After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at *http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main.* For performance tests that cannot be entered into WebFIRE (*i.e.,* Method 9 of appendix A–4 of this part opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243–01; RTP, NC 27711.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Minor Source Operating Permit (MSOP)

Source Description and Location

Source Name:	**Peabody Midwest Mining LLC - Bear Run Mine**
Source Location:	**7255 Eat CR 600 South, Carlisle, IN 47838**
County:	**Sullivan**
SIC Code:	**1221**
Operation Permit No.:	**153-28491-00011**
Operation Permit Issuance Date:	**August 9, 2010**
Significant Permit Revision No.:	**153-33173-00011**
Permit Reviewer:	**Kristen Willoughby**

On May 7, 2013, the Office of Air Quality (OAQ) received an application from Peabody Midwest Mining LLC - Bear Run Mine related to a modification to an existing stationary coal mine collocated with a coal preparation plant.

Existing Approvals

The source was issued MSOP No. M153-28491-00011 on August 9, 2010. The source has since received the following approvals:

(a) Notice-Only Change No. 153-29637-00011, issued on October 14, 2010; and

(b) Notice-Only Change No. 153-30273-00011, issued on March 23, 2011.

County Attainment Status

The source is located in Sullivan County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

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 ozone. Sullivan County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Sullivan County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$, NO_X, and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

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

Fugitive Emissions

(a) The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

(b) This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, however, there is an applicable New Source Performance Standard (i.e., NSPS, Subpart Y, Standards of Performance for Coal Preparation Plants) that was in effect on August 7, 1980, therefore fugitive emissions from the coal preparation/processing plant (a support facility for the coal mine) are counted toward the determination of PSD and Part 70 Permit applicability. This determination is based on the following EPA determinations:

Clarification on Fugitive Emissions Policy (EPA Memo dated March 6, 2003)
http://www.epa.gov/Region7/air/nsr/nsrmemos/20030306.pdf

National Guidance on Interpretation of the New Source Performance Standards - Subpart Y (Standards of Performance for Coal Preparation Plants) (EPA Memo dated November 16, 1998)
http://www.epa.gov/Region7/air/title5/t5memos/fugitivey.pdf

PSD Applicability, South Hospah Mine (EPA Memo dated June 9, 1980)
http://www.epa.gov/Region7/air/nsr/nsrmemos/psdaplic.pdf

The above EPA determinations indicate that the primary activity at a coal mine with a coal preparation/processing plant is the coal mine. Coal mines are not a “listed source category” within the definition of major source under Prevention of Significant Deterioration (PSD) and Title V (i.e., they are not one of the 28 listed source categories and are not a source category regulated by a section 111 (NSPS) or 112 (NESHAP) standard on or before August 7, 1980). Therefore, fugitive emissions from the coal mine (blasting, removal of overburden, loading into trucks, dumping and storage of coal at the mine, and haul road traffic at the mine) would not be included in determining whether the entire source is major under PSD and Title V.

However, since coal preparation/processing plants are regulated by NSPS Subpart Y (proposed on October 24, 1974, and promulgated on January 15, 1976), they are considered a “listed source category” within the definition of major source under PSD and Title V. Therefore, both fugitive and non-fugitive emissions from all units at a coal preparation/processing plant (including emissions from units that are not regulated as “affected facilities” under NSPS Subpart Y like coal dumping/unloading at the coal preparation/processing plant) would be included in determining whether the entire source is major under PSD and Title V.

Status of the Existing Source

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

This PTE table is from the Appendix A of Notice-Only Change 153-30273-00011, issued on March 3, 2010.

	Potential To Emit of the Entire Source Prior to Issuance of MSOP Revision (tons/year)									
Process/ Emission Unit	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
Coal Preparation / Processing Plant (Fugitive and Non-Fugitive Emissions)										
Material Handling	[1)] 39.96	27.50	3.82	--	--	--	--	--	--	--
Material Storage Piles (fugitive)	[2)] 9.95	5.05	5.05	--	--	--	--	--	--	--
Unpaved Roads (fugitive)	[3)] 199.78	62.37	6.24	--	--	--	--	--	--	--
Total	249.69	94.91	15.11	--	--	--	--	--	--	--
Coal Mine (Fugitive Emissions)										
Coal Mining	4949	2573	148	--	--	--	--	--	--	--
Coal Mine Storage Piles	25.07	8.78	8.78	--	--	--	--	--	--	--
Coal Mine Unpaved Roads	6181	1595	159	--	--	--	--	--	--	--
Total	11155	4177	317	--	--	--	--	--	--	--
Total PTE of Entire Source	11405	4272	331.80	--	--	--	--	--	--	--
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA

negl. = negligible
[1)] 39.93 = 0.00502 (lbs PM/ton coal throughput) x 15,918,500 (tons/coal) x 1/2000 (lb/ton)
[2)] 9.95 = 0.00125 (lbs PM/ton coal throughput) x 15,918,500 (tons/coal) x 1/2000 (lb/ton)
[3)] 199.78 = 0.0251 (lbs PM/ton coal throughput) x 15,918,500 (tons/coal) x 1/2000 (lb/ton)
*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Peabody Midwest Mining LLC - Bear Run Mine on May 7, 2013, relating to the addition of two (2) conveyors, a screener, and storage pile for the removal and storage of oversized material.

The following is a list of the new emission units and pollution control device:

(a) one (1) enclosed coal conveyor to screen, identified as Unit 42A, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(b) one (1) scalping screen, identified as Unit 42S, with a maximum capacity of 400 tons per hour, approved in 2013 for construction, using water misting for particulate control, and exhausting to the atmosphere; and

(c) one (1) enclosed coal conveyor from screen, identified as Unit 42B, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere.

(d) one (1) oversize coal storage pile, identified as Unit 42O, approved in 2013 for construction, exhausting to the atmosphere;

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of Proposed Modification (tons/year)									
	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e	Total HAPs	Worst Single HAP
Coal conveyor to screen (Unit 42A)	0.80	0.38	0.06	--	--	--	--	--	--	--
Scalping screen (Unit 42S)	3.85	1.30	0.09	--	--	--	--	--	--	--
Coal conveyor from screen (Unit 42B)	0.80	0.38	0.06	--	--	--	--	--	--	--
Oversized coal storage pile (Unit 42O)	0.33	0.11	0.11	--	--	--	--	--	--	--
Total PTE of Proposed Modification	5.46	2.06	0.20	--	--	--	--	--	--	--

Pursuant to 326 IAC 2-6.1-6(i)(1)(A), this MSOP is revised through Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit Revision and the proposed revision would be subject to 326 IAC 2-2 (PSD), 326 IAC 2-3 (EO), or 326 IAC 2-4.1 (MACT).

PTE of the Entire Source After Issuance of the MSOP Revision

The table below summarizes the potential to emit of the entire source, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of MSOP Revision (tons/year)									
	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
Coal Preparation / Processing Plant (Fugitive and Non-Fugitive Emissions)										
Material Handling	~~39.96~~ **31.48**	~~27.50~~ **28.61**	~~3.82~~ **3.93**	--	--	--	--	--	--	--
Material Storage Piles (fugitive)	~~9.95~~ **14.75**	~~5.05~~ **5.16**	~~5.05~~ **5.16**	--	--	--	--	--	--	--
Unpaved Roads (fugitive)	~~199.78~~ **120.88**	62.37	6.24	--	--	--	--	--	--	--
Total	~~<250.00~~ **167.11**	~~94.91~~ **96.14**	~~15.11~~ **15.33**	--	--	--	--	--	--	--
Coal Mine (Fugitive Emissions)										
Coal Mining	4949	2573	148	--	--	--	--	--	--	--
Coal Mine Storage Piles	25.07	8.78	8.78	--	--	--	--	--	--	--
Coal Mine Unpaved Roads	3090	1595	159	--	--	--	--	--	--	--
Total	8064	4177	317	--	--	--	--	--	--	--
Total PTE of Entire Source	~~11405~~ **8231**	~~4272~~ **4273**	~~331.80~~ **332.33**	--	--	--	--	--	--	--
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA

negl. = negligible
*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this MSOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of MSOP Revision (tons/year)									
	PM	PM10*	PM2.5*	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
Coal Preparation / Processing Plant (Fugitive and Non-Fugitive Emissions)										
Material Handling	31.48	28.61	3.93	--	--	--	--	--	--	--
Material Storage Piles (fugitive)	14.75	5.16	5.16	--	--	--	--	--	--	--
Unpaved Roads (fugitive)	120.88	62.37	6.24	--	--	--	--	--	--	--
Total	167.11	96.14	15.33	--	--	--	--	--	--	--
Coal Mine (Fugitive Emissions)										
Coal Mining	4949	2573	148	--	--	--	--	--	--	--
Coal Mine Storage Piles	25.07	8.78	8.78	--	--	--	--	--	--	--
Coal Mine Unpaved Roads	3090	1595	159	--	--	--	--	--	--	--
Total	8064	4177	317	--	--	--	--	--	--	--
Total PTE of Entire Source	8231	4273	332.33	--	--	--	--	--	--	--
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA

negl. = negligible
*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

MSOP Status

(a) This revision to an existing Title V minor stationary source will not change the minor status, because the uncontrolled/unlimited potential to emit criteria pollutants from the entire source will still be less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-6.1 (MSOP).

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The two (2) new conveyors and scalping screen are subject to the New Source Performance Standards (NSPS) for Coal Preparation and Processing Plants, 40 CFR Part 60, Subpart Y, (326 IAC 12), because they have a maximum process rate greater than 200 tons of coal per day.

Applicable portions of the NSPS are the following:

(1) 40 CFR 60.250(a) and (d)
(2) 40 CFR 60.251
(3) 40 CFR 60.254(b) and (c)
(4) 40 CFR 60.255(b) through (h)
(5) 40 CFR 60.256(b) and (c)
(6) 40 CFR 60.257

(7) 40 CFR 60.258

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the coal preparation/processing plant except as otherwise specified in 40 CFR 60, Subpart Y.

(b) The requirements of the New Source Performance Standards for Metallic Mineral Processing Plants, 40 CFR 60, Subpart LL (40 CFR 60.380 through 60.386) (326 IAC 12), are not included in the permit, since this source does not produce metallic mineral concentrates from ore as defined by 40 CFR 60.381. This source processes coal that does not meet the definition of a metallic mineral concentrate under by 40 CFR 60.381.

(c) The requirements of the New Source Performance Standards for Nonmetallic Mineral Processing Plants, 40 CFR 60, Subpart OOO (40 CFR 60.670 through 60.676) (326 IAC 12), are not included in the permit, since this source does not include primarily crushing of nonmetallic minerals as defined by 40 CFR 60.671. This source includes primarily crushing of coal, which is not considered a nonmetallic mineral under by 40 CFR 60.671.

(d) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Carbon Black Production Area Sources, 40 CFR 63, Subpart MMMMMM, are not included in the permit, because this source includes a coal preparation/processing plant, which is not considered a carbon black production facility.

(f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

(g) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

(a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the MSOP Revision Section above.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the source shall comply with the following existing PSD minor limits:

(a) PM emissions from the material processing, handling, crushing, screening, and conveying operations at the coal preparation/processing plant shall not exceed 0.00395 pounds per ton of coal throughput;

(b) PM emissions from the material storage piles at the coal preparation/processing plant shall not exceed 0.00185 pounds per ton of coal throughput;

(c) PM emissions from the unpaved roads at the coal preparation and processing plant site shall not exceed 0.0152 pounds per ton of coal throughput;

(d) moisture content of the coal processed at the coal preparation/processing plant prior to washing in the Preparation Plant shall be equal to or greater than 10.0 percent by weight;

(e) moisture content of the coal processed at the coal preparation/processing plant after washing in the Preparation Plant shall be equal to or greater than 11.5 percent by weight;

Compliance with these limits, combined with the maximum throughput capacity of the coal preparation/processing plant (15,918,500 tons/yr) and PM emissions from other emission units at the coal preparation/processing plant, shall limit the total PM emissions from the coal preparation/processing plant to less than 250 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

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

(1) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the scalping screen (Unit 42S) shall not exceed 66.31 pounds per hour when operating at a process weight rate of 400 tons per hour. The pound per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed the emission rate derived by the equation above, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

Based on calculations, a control device is not needed to comply with this limit.

(1) The potential to emit for each of the two (2) new conveyors (Unit 42A and 42B) is less than 0.551 lbs/hr. Therefore pursuant to 326 IAC 6-3-2(b)(14), these units are exempt from the requirements of 326 IAC 6-3-2.

(e) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions greater than 25 tons per year. Pursuant to 326 IAC 6-5, fugitive particulate matter emissions from the new units shall be controlled according to the Fugitive Dust Control Plan, which is included as Attachment A to the permit.

Compliance Determination, Monitoring and Testing Requirements

There is no change to the compliance requirements as a result of this revision.

Proposed Changes

(a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(1) Condition A.2 and the Section D.2 facility description box have been updated to reflect the new emission units.

(2) Condition D.2.1 has been updated to include the revised PSD minor limits.

(3) Condition D.2.2 has been updated to include the new unit subject to 326 IAC 6-3-2.

(4) Condition D.2.10 has been updated to reflect the revised PSD minor limit in Condition D.2.1.

(b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(1) The pound per hour emissions from Unit 51 have been recalculated using the emission factor from AP-42 Section 11.19.2. The emissions are greater than 0.551 lb/hr. Therefore, this unit is subject to the requirements of 326 IAC 6-3-2. Based on the potential to emit for the unit, Unit 51 can comply with the 326 IAC 6-3-2 limit without the use of a control device. Condition D.2.2 has been updated to add this unit.

A.2 Emission Units and Pollution Control Equipment Summary

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

***

(c) one (1) coal preparation and processing plant, constructed in 2010 and approved for increased production in 2010, with a maximum processing rate of 15,918,500 tons of raw coal and coal refuse per year, combined, including the following equipment and activities:

(1) Process Circuit

***

(2) Dry Crush Circuit

(A) one (1) raw coal storage pile, identified as Unit 32, exhausting to the atmosphere;

(B) one (1) feeder bin system, identified as Unit 33, with a maximum capacity of 2000 tons per hour exhausting to the atmosphere;

(C) one (1) feeder bin outlet drop to raw coal conveyor, identified as Unit 34, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 35, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 36, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 37, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(G) one (1) enclosed breaker outlet coal conveyor, identified as Unit 38, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(H) one (1) enclosed coarse coal conveyor, identified as Unit 39, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(I) one (1) coarse coal storage pile, identified as Unit 40, exhausting to the atmosphere;

(J) one (1) crusher, identified as Unit 41, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(K) one (1) enclosed coal conveyor to screen, identified as Unit 42A, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(L) one (1) scalping screen, identified as Unit 42S, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) one (1) enclosed coal conveyor from screen, identified as Unit 42B, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(N) one (1) oversize coal storage pile, identified as Unit 42O, approved in 2013 for construction, exhausting to the atmosphere;

(~~K~~**O**) one (1) enclosed dry crush coal conveyor with radial stacker, identified as Unit 42, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(3) Dry Stoker Circuit

***

SECTION D.2 FACILITY OPERATION CONDITIONS

Emissions Unit Description: Continued

***

(K) one (1) enclosed coal conveyor to screen, identified as Unit 42A, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(L) one (1) scalping screen, identified as Unit 42S, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) **one (1) enclosed coal conveyor from screen, identified as Unit 42B, approved in 2013 for construction, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;**

(N) **one (1) oversize coal storage pile, identified as Unit 42O, approved in 2013 for construction, exhausting to the atmosphere;**

(~~K~~**O**) one (1) enclosed dry crush coal conveyor with radial stacker, identified as Unit 42, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

***

Under 40 CFR 60, Subpart Y, the equipment and activities associated with the coal preparation and processing plant listed under item (c) above are considered affected facilities.
[40 CFR 60, Subpart Y][326 IAC 12]

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.2.1 Coal Moisture Content and Particulate Matter (PM) Emission Limitations [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the source shall comply with the following:

(a) PM emissions from the material processing, handling, crushing, screening, and conveying operations at the coal preparation/processing plant shall not exceed ~~0.00502~~ **0.00395** pounds per ton of coal throughput;

(b) PM emissions from the material storage piles at the coal preparation/processing plant shall not exceed ~~0.00125~~ **0.00185** pounds per ton of coal throughput;

(c) PM emissions from the unpaved roads at the coal preparation and processing plant site shall not exceed ~~0.0251~~ **0.0152** pounds per ton of coal throughput;

(d) moisture content of the coal processed at the coal preparation/processing plant prior to washing in the Preparation Plant shall be equal to or greater than 10.0 percent by weight;

(e) moisture content of the coal processed at the coal preparation/processing plant after washing in the Preparation Plant shall be equal to or greater than 11.5 percent by weight;

~~(f) the throughput of coal, including raw coal and coal refuse, to the coal preparation/ processing plant shall be less than 15,918,500 tons per 12 consecutive month period, with compliance determined at the end of each month.~~

Compliance with these limits, combined with the **maximum throughput capacity of the coal preparation/processing plant (15,918,500 tons/yr) and** PM emissions from other emission units at the coal preparation/processing plant, shall limit the total PM emissions from the coal preparation/processing plant to less than 250 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following facilities shall not exceed the allowable emission rates listed in the following table:

Unit ID	Description	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
1	Raw coal storage pile	2000	86.90
2	Coal truck unloading station for the Process Circuit	2000	86.90
3	Feeder bin	2000	86.90
4	Raw coal conveyor	2000	86.90
5	Scalping screen	2000	86.90
6	Rotary breaker	2000	86.90
7	Rotary breaker outlet drop to breaker reject storage pile	2000	86.90
9	Raw coal conveyor	2000	86.90
10	Raw coal stacking tube	2000	86.90
12	Raw coal stacking tube transfer conveyor	2000	86.90
13	Raw coal stacking tube	2000	86.90
15	Raw coal conveyor	2000	86.90
21	Plant clean coal conveyor	1600	83.83
22	No. 4 clean coal stacking tube	1600	83.83
24	Clean coal stacking tube transfer conveyor	1500	82.95
25	No. 3 clean coal stacking tube	1500	82.95
27	Clean coal loadout conveyor No. 1	4000	96.96
28	Clean coal loadout conveyor No. 2	4000	96.96
29	Clean coal storage bin with train loadout	4000	96.96
30	Industrial steam coal loadout conveyor	4000	96.96
32	Raw coal storage pile	2000	86.90
33	Feeder bin system	2000	86.90
34	Feeder bin outlet drop to raw coal conveyor	2000	86.90
35	Raw coal conveyor	2000	86.90
36	Scalping screen	2000	86.90
37	Rotary breaker	2000	86.90
38	Breaker outlet coal conveyor	2000	86.90
39	Coarse coal conveyor	2000	86.90
41	Crusher	2000	86.90
42S	**Scalping screen**	**400**	**66.31**
42	Dry crush coal conveyor with radial stacker	2000	86.90
51	**Secondary screen**	**400**	**66.31**

These pounds per hour limitations were calculated with the following equations:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed the emission rate derived by the equation above, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

***

D.2.10 Record Keeping Requirements

~~(a) To document the compliance status with Condition D.2.1(f), the Permittee shall maintain records of coal processed, including raw coal and coal refuse, at the coal preparation/ processing plant.~~

(~~b~~a) To document the compliance status with Condition D.2.8, the Permittee shall maintain records of coal moisture content analyses, when moisture content analyses are performed.

(~~c~~b) To document the compliance status with Condition D.2.9, the Permittee shall maintain records of the visible emission notations of the process emission points for the equipment and activities associated with the coal preparation and processing plant listed under item (c) of this section facility description box. The Permittee shall include in its records when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g., the process did not operate that day).

(~~d~~c) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

Conclusion and Recommendation

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 7, 2013.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed MSOP Significant Permit Revision No. 153-33173-00011. The staff recommends to the Commissioner that this MSOP Significant Permit Revision be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Kristen Willoughby at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-3031 or toll free at 1-800-451-6027 extension 3-3031.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

Attachment A: Emissions Calculations
Emission Summary

Company Name: **Peabody Midwest Mining LLC - Bear Run Mine**
Source Address: **7255 East CR 600 South, Carlisle, IN 47838**
Minor Source Operating Permit No.: **M153-28491-00011**
Significant Permit Revision No.: **153-33173-00011**
Permit Reviewer: **Kristen Willoughby**

			Potential to Emit (PTE) of the Administrative Amendment (tons/year)						
Process Description	PM	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Worst Single HAP
Coal conveyor to screen (Unit 42A)	0.80	0.38	0.06	-	-	-	-	-	-
Scalping screen (Unit 42S)	3.85	1.30	0.09	-	-	-	-	-	-
Coal conveyor from screen (Unit 42B)	0.80	0.38	0.06	-	-	-	-	-	-
Oversized coal storage pile (Unit 42O)	0.33	0.11	0.11	-	-	-	-	-	-
Total	**5.46**	**2.06**	**0.20**	-	-	-	-	-	-

	Uncontrolled / Max Throughput Capacity Potential to Emit (PTE) (tons/year)							
Process Description	PM10	PM2.5	SO2	NOx	VOC	CO	Total HAPs	Worst Single HAP
Coal Preparation/Processing Plant (Fugitive and Non-Fugitive Emissions)*								
Coal Preparation/Processing Plant Material Handling	28.61	3.93	-	-	-	-	-	-
Coal Preparation/Processing Plant Material Storage Piles (fugitive)	5.16	5.16	-	-	-	-	-	-
Coal Preparation/Processing Plant Unpaved Roads (fugitive)	62.37	6.24	-	-	-	-	-	-
Total*	**96.14**	**15.33**	-	-	-	-	-	-
Coal Mine (Fugitive Emissions)**								
Coal Mining (fugitive)**	2573.49	148.47	-	-	-	-	-	-
Coal Mine Storage Piles (fugitive)**	8.78	8.78	-	-	-	-	-	-
Coal Mine Unpaved Roads (fugitive)**	1594.52	159.45	-	-	-	-	-	-
Coal Mine Blasting (fugitive)**	**	**	-	-	-	-	-	-
Total**	**4176.79**	**316.70**	-	-	-	-	-	-

	Particulate Matter Emissions			
Process Description	Max Throughput Capacity Emissions (ton/yr)	Limited Emissions (ton/yr)	Maximum Annual Throughput (ton/yr)	Limited Emissions*** (lb/ton)
Coal Preparation/Processing Plant (Fugitive and Non-Fugitive Emissions)*				
Coal Preparation/Processing Plant Material Handling	66.80	31.48	15,918,500	3.95E-03
Coal Preparation/Processing Plant Material Storage Piles (fugitive)	14.75	14.75	15,918,500	1.85E-03
Coal Preparation/Processing Plant Unpaved Roads (fugitive)	367.68	120.88	15,918,500	1.52E-02
Total*	**449.23**	**167.11**		
Coal Mine (Fugitive Emissions)**				
Coal Mining (fugitive)**	4949.03	4949.03		
Coal Mine Storage Piles (fugitive)**	25.07	25.07		
Coal Mine Unpaved Roads (fugitive)**	9400.25	3090.49		
Coal Mine Blasting (fugitive)**	**	**		
Total**	**14374.35**	**8064.59**		

*Since the coal preparation/processing plant is in a source category for which there is an applicable New Source Performance Standard (i.e., NSPS, Subpart Y, Standards of Performance for Coal Preparation Plants) that was in effect on August 7, 1980, the fugitive emissions from the coal preparation/processing plant (a support facility for the coal mine) are counted toward the determination of PSD and Part 70 Permit applicability. For a detailed explanation, see the TSD section entitled "Fugitive Emissions".

**Fugitive emissions from the coal mine (blasting, removal of overburden, loading into trucks, dumping and storage of coal at the mine, and haul road traffic at the mine) are not be included in determining whether the entire source is major under PSD and Title V. For a detailed explanation, see the TSD section entitled "Fugitive Emissions". Coal mining blasting emissions are not calculated at this time for this reason.

***Limited Emissions (lb/ton) = (Limited Emissions (ton/yr) x 2000 lb / 1 ton) / Maximum Annual Throughput (ton/yr)

Attachment A: Emissions Calculations
New Units

Company Name: **Peabody Midwest Mining LLC - Bear Run Mine**
Source Address: **7255 East CR 600 South, Carlisle, IN 47838**
Minor Source Operating Permit No.: **M153-28491-00011**
Significant Permit Revision No.: **153-33173-00011**
Permit Reviewer: **Kristen Willoughby**

Emission Factors for Material Processing, Handling, and Conveying (Batch or Continuous Drop Operations AP-42 Section 13.2.4)
The following calculations determine the emission factors for handling (drop points within the process) of materials in the coal preparation/processing plant, based on the minimum anticipated moisture content of the raw coal prior to washing.

Ef = k*(0.0032)*[(U/5)^1.3 / (M/2)^1.4]
where: Ef = Emission factor (lb/ton)

k (PM) =	0.74	= particle size multiplier (0.74 assumed for aerodynamic diameter <=100 um)
k (PM10) =	0.35	= particle size multiplier (0.35 assumed for aerodynamic diameter <=10 um)
k (PM2.5) =	0.053	= particle size multiplier (0.053 assumed for aerodynamic diameter <=2.5 um)
U =	8	= worst case annual mean wind speed (miles/hour)

Material	Minimum Material Moisture Content (%)*	PM Emission Factor (lb/ton)**	PM10 Emission Factor (lb/ton)**	PM2.5 Emission Factor (lb/ton)**
Raw coal prior to washing	10.0	4.58E-04	2.17E-04	3.28E-05

*Minimum material moisture content based on coal data for this mine and anticipated minimum moisture content after washing
**From AP-42 Section 13.2.4.3

Emission Factors for Crushing/Breaking and Screening (AP-42 Section 11.19.2)
The following emission factor are used to determine the PTE of screening of raw coal in the preparation/processing plant, based on the minimum anticipated moisture content of the raw coal.

Process Type	Minimum Material Moisture Content (%)*	PM Emission Factor (lb/ton)**	PM10 Emission Factor (lb/ton)**	PM2.5 Emission Factor (lb/ton)**
Screening (controlled)**	10.0	0.0022	0.00074	0.00005

*Minimum material moisture content based on coal data for this mine
**The minimum moisture content of the raw coal (10.0%) is significantly higher than moisture content of crushed stone controlled by with wet suppression (0.55% to 2.88%) as indicated in AP-42 Section 11.19.2, Table 11.19.2-2. Therefore, IDEM OAQ has calculated the PTE from the crushing/breaking and screening using controlled emission factors from AP-42 Section 11.19.2, Table 11.19.2-2.

Methodology
Uncontrolled PTE (tons/yr) = (Maximum Material Handling Throughput (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr)) * (1 - Control Efficiency)
For process weight rates in excess of 60,000 lbs/hr (30 tons/hr), 326 IAC 6-3-2 Allowable Particulate Emission Rate (lbs/hour) = 55 * [Maximum Process Weight Rate (tons/hour)]^(0.11) - 40

Sources for Emission Factors
1. From AP-42 Section 13.2.4.3 formula using minimum coal moisture content of 10.0%, and worst case annual mean wind speed of 8 miles/hour
2. From AP-42 Section 13.2.4.3 formula using minimum coal moisture content of 11.5%, and worst case annual mean wind speed of 8 miles/hour
3. From AP-42 Section 11.19.2, Table 11.19.2-2.

														326 IAC 6-3-2 Allowable Particulate Emission Rate			
Process/Vent ID	Description	Type of Emission Point	Maximum Hourly Throughput (tons/hour)	Maximum Throughput (tons/year)	Uncontrolled PTE of PM (tons/year)	Uncontrolled PTE of PM10 (tons/year)	Uncontrolled PTE of PM2.5 (tons/year)	Source of Emission Factor *See chart above*	Type of Controls	Expected Overall Control Efficiency	Controlled PTE of PM (tons/year)	Controlled PTE of PM10 (tons/year)	Controlled PTE of PM2.5 (tons/year)	Maximum Process Weight Rate (tons/hour)	Maximum Hourly Emission Rate (lbs/hour)	Subject to 326 IAC 6-3?	326 IAC 6-3-2 Allowable Particulate Emission Rate (lbs/hour)
42A	Coal conveyor to screen	conveyor	400	3,504,000	0.80	0.38	0.06	1	90% enclosure	90.0%	0.0803	0.0380	0.0058	400	0.183	no	66.314
42S	Scalping screen	screen	400	3,504,000	3.85	1.30	0.09	3	95% - water mister	95.0%	0.1927	0.0648	0.0044	400	0.880	yes	66.314
42B	Coal conveyor from screen	conveyor	400	3,504,000	0.80	0.38	0.06	1	90% enclosure	90.0%	0.0803	0.0380	0.0058	400	0.183	no	66.314
				Total	**5.46**	**2.06**	**0.20**				**0.35**	**0.14**	**0.02**				

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
where Ef = emission factor (lb/acre/day)
s = silt content (wt %)
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

Material Storage Pile	Stockpile ID	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	Uncontrolled PTE of PM (tons/yr)	Uncontrolled PTE of PM10/PM2.5 (tons/yr)
Oversized coal storage pile	42O	6.2	7.18	0.25	0.327	0.115

Methodology
*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)
**Maximum anticipated pile size (acres) provided by the source.
Uncontrolled PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)
Uncontrolled PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr)) * (1 - Dust Control Efficiency)

Attachment A: Emissions Calculations
Coal Preparation/Processing Plant
Material Processing, Handling, Crushing, Screening, and Conveying

Company Name: Peabody Midwest Mining LLC - Bear Run Mine
Source Address: 7255 East CR 600 South, Carlisle, IN 47838
Minor Source Operating Permit No.: M153-28491-00011
Significant Permit Revision No.: 153-33173-00011
Permit Reviewer: Kristen Willoughby

Emission Factors for Material Processing, Handling, and Conveying (Batch or Continuous Drop Operations AP-42 Section 13.2.4)

The following calculations determine the emission factors for handling (drop points within the process) of materials in the coal preparation/processing plant, based on the minimum anticipated moisture content of the raw coal prior to washing and after washing in the process.

Ef = k*(0.0032)*[(U/5)^1.3 / (M/2)^1.4]

where:	Ef =	Emission factor (lb/ton)
k (PM) =	0.74	= particle size multiplier (0.74 assumed for aerodynamic diameter <=100 um)
k (PM10) =	0.35	= particle size multiplier (0.35 assumed for aerodynamic diameter <=10 um)
k (PM2.5) =	0.053	= particle size multiplier (0.053 assumed for aerodynamic diameter <=2.5 um)
U =	8	= worst case annual mean wind speed (miles/hour)

Material	Minimum Material Moisture Content (%)*	PM Emission Factor (lb/ton)**	PM10 Emission Factor (lb/ton)**	PM2.5 Emission Factor (lb/ton)**
Raw coal prior to washing	10.0	4.58E-04	2.17E-04	3.28E-05
Coal after washing in processing plant	11.5	3.77E-04	1.78E-04	2.70E-05

*Minimum material moisture content based on coal data for this mine and anticipated minimum moisture content after washing
**From AP-42 Section 13.2.4.3

Emission Factors for Crushing/Breaking and Screening (AP-42 Section 11.19.2)

The following emission factor are used to determine the PTE of crushing/breaking and screening of raw coal in the preparation/processing plant, based on the minimum anticipated moisture content of the raw coal

Process Type	Minimum Material Moisture Content (%)*	PM Emission Factor (lb/ton)**	PM10 Emission Factor (lb/ton)**	PM2.5 Emission Factor (lb/ton)**
Tertiary Crushing/Breaking (controlled)**	10.0	0.0012	0.00054	0.00010
Screening (controlled)**	10.0	0.0022	0.00074	0.00005

*Minimum material moisture content based on coal data for this mine
**The minimum moisture content of the raw coal (10.0%) is significantly higher than moisture content of crushed stone controlled by with wet suppression (0.55% to 2.88%) as indicated in AP-42 Section 11.19.2, Table 11.19.2-2. Therefore, IDEM OAQ has calculated the PTE from the crushing/breaking and screening using controlled emission factors from AP-42 Section 11.19.2, Table 11.19.2-2.

Methodology
*Coal Preparation Plant Stockpile Emissions found on Coal Preparation Plant Material Storage Piles page.
**Unpaved Road Emissions found on Unpaved Roads pages.
Maximum Annual Throughput (tons/year) based on worst case production from the coal mine and anticipated breakdown in process according to material composition/characteristics
Maximum Annual Throughput (tons/year) is less than the maximum rated capacities of the process due to a bottleneck at the mine.
Uncontrolled PTE (tons/yr) = (Maximum Material Handling Throughput (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr)) * (1 - Control Efficiency)
For process weight rates in excess of 60,000 lbs/hr (30 tons/hr), 326 IAC 6-3-2 Allowable Particulate Emission Rate (lbs/hour) = 55 * [Maximum Process Weight Rate (tons/hour)]^(0.11) - 40

Sources for Emission Factors
1. From AP-42 Section 13.2.4.3 formula using minimum coal moisture content of 10.0%, and worst case annual mean wind speed of 8 miles/hour
2. From AP-42 Section 13.2.4.3 formula using minimum coal moisture content of 11.5%, and worst case annual mean wind speed of 8 miles/hour
3. From AP-42 Section 11.19.2, Table 11.19.2-2.

Calculations shown on next page

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate matter (< 2.5 um)

PTE = Potential to Emit
NA = Not Applicable

Attachment A: Emissions Calculations
Coal Preparation/Processing Plant
Material Processing, Handling, Crushing, Screening, and Conveying

													326 IAC 6-3-2 Allowable Particulate Emission Rate			
Process/Vent ID	Description	Type of Emission Point	[1)] Maximum Annual Throughput (tons/year)	Uncontrolled PTE of PM (tons/year)	Uncontrolled PTE of PM10 (tons/year)	Uncontrolled PTE of PM2.5 (tons/year)	Source of Emission Factor *See chart above*	Type of Controls	Expected Overall Control Efficiency	Controlled PTE of PM (tons/year)	Controlled PTE of PM10 (tons/year)	Controlled PTE of PM2.5 (tons/year)	Maximum Process Weight Rate (tons/hour)	Maximum Hourly Emission Rate (lbs/hour)	Subject to 326 IAC 6-3?	326 IAC 6-3-2 Allowable Particulate Emission Rate (lbs/hour)
Process Circuit																
1	Run of mine coal stockpile	stockpile*														
2	Run of mine coal truck dump to feeder	drop	14,000,000	3.21	1.52	0.23	1	95% - water mister	95.0%	0.16	0.076	0.011	2000	0.917	yes	86.904
3	Feeder to run of mine coal breaker conveyor	drop	14,000,000	3.21	1.52	0.23	1	95% - water mister	95.0%	0.16	0.076	0.011	2000	0.917	yes	86.904
4	Run of mine breaker feed conveyor	conveyor	14,000,000	3.21	1.52	0.23	1	95% - water mister, 90% enclosure	99.5%	0.02	0.008	0.001	2000	0.917	yes	86.904
5	Scalping screen	screen	14,000,000	15.40	5.18	0.35	3	95% - water mister	95.0%	0.77	0.259	0.018	2000	4.400	yes	86.904
6	Rotary breaker	rotary breaker	14,000,000	8.40	3.78	0.70	3	95% - water mister	95.0%	0.42	0.189	0.035	2000	2.400	yes	86.904
7	Rotary breaker drop to breaker reject bunker	drop	420,000	0.096	0.046	0.007	1	95% - water mister	95.0%	0.005	0.002	0.0003	2000	0.917	yes	86.904
8	Breaker reject bunker	stockpile*														
9	Raw coal conveyor No. 4	conveyor	13,580,000	3.11	1.47	0.223	1	95% - water mister, 90% enclosure	99.5%	0.016	0.007	0.0011	2000	0.917	yes	86.904
10	No. 2 raw coal stacking tube	drop	6,790,000	1.56	0.74	0.111	1	95% - water mister	95.0%	0.078	0.037	0.006	2000	0.917	yes	86.904
11	No. 2 raw coal stockpile	stockpile*														
12	Raw coal stacking tube transfer conveyor	conveyor	6,790,000	1.56	0.74	0.111	1	95% - water mister, 90% enclosure	99.5%	0.008	0.004	0.0006	2000	0.917	yes	86.904
13	No. 1 raw coal stacking tube	drop	6,790,000	1.56	0.74	0.111	1	95% - water mister	95.0%	0.078	0.037	0.006	2000	0.917	yes	86.904
14	No. 1 raw coal stockpile	stockpile*														
15	Plany feed conveyor	conveyor	13,580,000	3.11	1.47	0.223	1	95% - water mister	95.0%	0.156	0.074	0.0111	2000	0.917	yes	86.904
16	Plant refuse collecting conveyor	conveyor	2,940,000	0.55	0.26	0.040	2	90% enclosure	90.0%	0.055	0.026	0.0040	500	0.188	no	NA
17	Reject bunker	stockpile*														
18	Refuse truck bin mass flow gate/bin bypass to reject bunker	drop	2,940,000	0.554	0.262	0.040	2	90% enclosure	90.0%	0.0554	0.0262	0.0040	500	0.188	no	NA
19	Stoker collecting conveyor	conveyor	300,000	0.057	0.027	0.004	2	90% enclosure	90.0%	0.0057	0.0027	0.00040	500	0.188	no	NA
20	Stoker bin mass flow gate and weigh belt	drop	75,000	0.014	0.007	0.001	2	none	0.0%	0.0141	0.0067	0.0010	500	0.188	no	NA
20a	Stoker Conveyor from stoker bin	conveyor	225,000	0.042	0.020	0.003	2	90% enclosure	90.0%	0.0042	0.002005	0.000304	500	0.188	no	NA
20b	Stoker Conveyor # 2 from stoker bin	conveyor	225,000	0.042	0.020	0.003	2	90% enclosure	90.0%	0.0042	0.002005	0.000304	500	0.188	no	NA
20c	Stoker Stockpile	stockpile*														
21	Plant clean coal conveyor	conveyor	9,220,000	1.74	0.82	0.124	2	90% enclosure	90.0%	0.1737	0.0822	0.0124	1600	0.6030	yes	83.827
22	No. 4 clean coal stacking tube	drop	4,610,000	0.87	0.41	0.062	2	none	0.0%	0.8687	0.4109	0.0622	1600	0.6030	yes	83.827
23	No. 4 clean coal stockpile	stockpile*														
24	Clean coal stacking tube transfer conveyor	conveyor	4,610,000	0.87	0.41	0.062	2	90% enclosure	90.0%	0.087	0.041	0.0062	1500	0.565	yes	82.951
25	No. 3 clean coal stacking tube	drop	4,610,000	0.87	0.41	0.062	2	none	0.0%	0.869	0.411	0.0622	1500	0.565	yes	82.951
26	No. 3 clean coal stockpile	stockpile*														
27	Clean coal loadout conveyor No. 1	conveyor	11,344,315	2.14	1.01	0.153	2	95% - water mister, 90% enclosure	99.5%	0.0107	0.0051	0.0008	4000	1.508	yes	96.959
28	Clean coal loadout conveyor No. 2	conveyor	10,883,315	2.05	0.97	0.147	2	95% - water mister, 90% enclosure	99.5%	0.0103	0.0048	0.0007	4000	1.508	yes	96.959
29	Train loadout hopper to train (inner and outer loops)	drop	10,883,315	2.05	0.97	0.147	2	95% - water mister	95.0%	0.1025	0.0485	0.0073	4000	1.508	yes	96.959
30	Industrial steam coal conveyor	conveyor	461,000	0.09	0.04	0.006	2	95% - water mister, 90% enclosure	99.5%	0.00043	0.00021	0.00003	4000	1.508	yes	96.959
31	Industrial steam coal stockpile	stockpile*														
Dry Crush Circuit																
32	Run of mine coal stockpile	stockpile*														
33	Run of mine coal truck dump to feeder	drop	1,918,500	0.44	0.21	0.031	1	none	0.0%	0.4397	0.2079	0.0315	2000	0.917	yes	86.904
34	Feeder to run of mine conveyor	conveyor	1,918,500	0.44	0.21	0.031	1	none	0.0%	0.4397	0.2079	0.0315	2000	0.917	yes	86.904
35	Run of mine conveyor	conveyor	1,918,500	0.44	0.21	0.031	1	90% enclosure	90.0%	0.0440	0.0208	0.0031	2000	0.917	yes	86.904
36	Scalping screen	screen	1,918,500	2.11	0.71	0.05	3	none	0.0%	2.1104	0.7098	0.0480	2000	4.400	yes	86.904
37	Rotary breaker	rotary breaker	1,918,500	1.15	0.52	0.10	3	none	0.0%	1.1511	0.5180	0.0959	2000	2.400	yes	86.904
38	Breaker collecting conveyor	conveyor	1,899,315	0.4353	0.2059	0.0312	1	90% enclosure	90.0%	0.043526	0.020587	0.003117	2000	0.917	yes	86.904
39	Coarse coal conveyor	conveyor	19,185	0.0044	0.0021	0.0003	1	90% enclosure	90.0%	0.000440	0.000208	0.000031	2000	0.917	yes	86.904
40	Coarse coal stockpile	stockpile*														
41	Crusher	crusher	1,899,315	1.14	0.51	0.09	3	none	0.0%	1.1396	0.5128	0.0950	2000	2.400	yes	86.904
42A	Coal conveyor to screen	conveyor	1,899,315	0.44	0.21	0.03	1	90% enclosure	90.0%	0.0435	0.0206	0.0031	400	0.183	no	66.314
42S	Scalping screen	screen	1,899,315	2.09	0.70	0.05	3	95% - water mister	95.0%	0.1045	0.0351	0.0024	400	0.880	yes	66.314
42B	Coal conveyor from screen	conveyor	1,899,315	0.44	0.21	0.03	1	90% enclosure	90.0%	0.0435	0.0206	0.0031	400	0.183	no	66.314
42O	Oversized coal storage pile	stockpile*														
42	Dry crush coal conveyor	conveyor	1,899,315	0.44	0.21	0.031	1	90% enclosure	90.0%	0.0435	0.0206	0.0031	2000	0.917	yes	86.904
43	Dry crush coal stockpile	stockpile*														
Dry Stoker Circuit (Fines)																
44	Feeder bin	drop	400,000	0.0917	0.0434	0.00657	1	none	0.0%	0.09167	0.04336	0.00657	400	0.183	no	NA
45	Feeder to coal conveyor	drop	400,000	0.0917	0.0434	0.00657	1	none	0.0%	0.09167	0.04336	0.00657	400	0.183	no	NA
46	Coal conveyor	conveyor	400,000	0.0917	0.0434	0.00657	1	none	0.0%	0.09167	0.04336	0.00657	400	0.183	no	NA
51	Secondary screen	screen	400,000	0.4400	0.1480	0.01000	3	none	0.0%	0.44000	0.14800	0.01000	400	0.880	no	NA
50	Collecting coal conveyor	conveyor	400,000	0.0917	0.0434	0.00657	1	none	0.0%	0.09167	0.04336	0.00657	400	0.183	no	NA
52	Oversize (stoker) coal stacker conveyor	conveyor	240,000	0.0550	0.0260	0.00394	1	none	0.0%	0.05500	0.02601	0.00394	400	0.183	no	NA
53	Oversize (stoker) coal stockpile	stockpile*														
54	Fines coal stacker conveyor	conveyor	160,000	0.0367	0.0173	0.00263	1	none	0.0%	0.03667	0.01734	0.00263	400	0.183	no	NA
55	Fines coal stockpile	stockpile*														
Roadways																
56	Preparation plant and coal yard roads	roads*														
			Totals	**66.80**	**28.61**	**3.93**				**10.63**	**4.50**	**0.63**				

Attachment A: Emissions Calculations
Coal Preparation/Processing Plant
Material Processing, Handling, Crushing, Screening, and Conveying

Process/Vent ID	Description	Type of Emission Point	Limited Control Efficiency	Controlled PTE of PM (tons/year)
Process Circuit				
1	Run of mine coal stockpile	stockpile*		
2	Run of mine coal truck dump to feeder	drop	60.0%	1.28
3	Feeder to run of mine coal breaker conveyor	drop	60.0%	1.28
4	Run of mine breaker feed conveyor	conveyor	60.0%	1.28
5	Scalping screen	screen	60.0%	6.16
6	Rotary breaker	rotary breaker	60.0%	3.36
7	Rotary breaker drop to breaker reject bunker	drop	60.0%	0.04
8	Breaker reject bunker	stockpile*		
9	Raw coal conveyor No. 4	conveyor	60.0%	1.24
10	No. 2 raw coal stacking tube	drop	60.0%	0.62
11	No. 2 raw coal stockpile	stockpile*		
12	Raw coal stacking tube transfer conveyor	conveyor	60.0%	0.62
13	No. 1 raw coal stacking tube	drop	60.0%	0.62
14	No. 1 raw coal stockpile	stockpile*		
15	Plany feed conveyor	conveyor	60.0%	1.24
16	Plant refuse collecting conveyor	conveyor	60.0%	0.22
17	Reject bunker	stockpile*		
18	Refuse truck bin mass flow gate/bin bypass to reject bunker	drop	60.0%	0.22
19	Stoker collecting conveyor	conveyor	60.0%	0.02
20	Stoker bin mass flow gate and weigh belt	drop	0.0%	0.01
20a	Stoker Conveyor from stoker bin	conveyor	60.0%	0.02
20b	Stoker Conveyor # 2 from stoker bin	conveyor	60.0%	0.02
20c	Stoker Stockpile	stockpile*		
21	Plant clean coal conveyor	conveyor	60.0%	0.69
22	No. 4 clean coal stacking tube	drop	0.0%	0.87
23	No. 4 clean coal stockpile	stockpile*		
24	Clean coal stacking tube transfer conveyor	conveyor	60.0%	0.35
25	No. 3 clean coal stacking tube	drop	0.0%	0.87
26	No. 3 clean coal stockpile	stockpile*		
27	Clean coal loadout conveyor No. 1	conveyor	60.0%	0.86
28	Clean coal loadout conveyor No. 2	conveyor	60.0%	0.82
29	Train loadout hopper to train (inner and outer loops)	drop	60.0%	0.82
30	Industrial steam coal conveyor	conveyor	60.0%	0.03
31	Industrial steam coal stockpile	stockpile*		
Dry Crush Circuit				
32	Run of mine coal stockpile	stockpile*		
33	Run of mine coal truck dump to feeder	drop	0.0%	0.44
34	Feeder to run of mine conveyor	conveyor	0.0%	0.44
35	Run of mine conveyor	conveyor	60.0%	0.18
36	Scalping screen	screen	0.0%	2.11
37	Rotary breaker	rotary breaker	0.0%	1.15
38	Breaker collecting conveyor	conveyor	60.0%	0.17
39	Coarse coal conveyor	conveyor	60.0%	0.00
40	Coarse coal stockpile	stockpile*		
41	Crusher	crusher	0.0%	1.14
42A	Coal conveyor to screen	conveyor	60.0%	0.17
42S	Scalping screen	screen	60.0%	0.84
42B	Coal conveyor from screen	conveyor	60.0%	0.17
42 O	Dry crush coal conveyor	conveyor	60.0%	0.17
43	Dry crush coal stockpile	stockpile*		
Dry Stoker Circuit (Fines)				
44	Feeder bin	drop	0.0%	0.09
45	Feeder to coal conveyor	drop	0.0%	0.09
46	Coal conveyor	conveyor	0.0%	0.09
51	Secondary screen	screen	0.0%	0.44
50	Collecting coal conveyor	conveyor	0.0%	0.09
52	Oversize (stoker) coal stacker conveyor	conveyor	0.0%	0.05
53	Oversize (stoker) coal stockpile	stockpile*		
54	Fines coal stacker conveyor	conveyor	0.0%	0.04
55	Fines coal stockpile	stockpile*		
Roadways				
56	Preparation plant and coal yard roads	roads*		
				31.48

Attachment A: Emissions Calculations
Coal Preparation/Processing Plant Material Storage Piles (fugitive)

Company Name: **Peabody Midwest Mining LLC - Bear Run Mine**
Source Address: **7255 East CR 600 South, Carlisle, IN 47838**
Minor Source Operating Permit No.: **M153-28491-00011**
Significant Permit Revision No.: **153-33173-00011**
Permit Reviewer: **Kristen Willoughby**

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
where Ef = emission factor (lb/acre/day)
s = silt content (wt %)
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

Material Storage Pile	Stockpile ID	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	Uncontrolled PTE of PM (tons/yr)	Uncontrolled PTE of PM10/PM2.5 (tons/yr)
Process Circuit run of mine coal pile	1	6.2	7.18	3.40	4.453	1.558
Process Circuit breaker reject bunker (rock)***	8	1.6	1.85	0.01	0.003	0.001
Process Circuit No. 2 raw coal pile	11	6.2	7.18	1.55	2.030	0.710
Process Circuit No. 1 raw coal pile	14	6.2	7.18	1.55	2.030	0.710
Process Circuit reject bunker (rock)***	17	1.6	1.85	0.01	0.003	0.001
Stoker Coal Stockpile	20c	6.2	7.18	0.50	0.655	0.229
Process Circuit No. 4 clean coal pile****	23	2.2	2.55	2.90	1.348	0.472
Process Circuit No. 3 clean coal pile****	26	2.2	2.55	2.20	1.022	0.358
Dry Crush Circuit direct ship coal pile	43	6.2	7.18	1.40	1.834	0.642
Process Circuit industrial steam coal pile****	31	2.2	2.55	0.50	0.232	0.081
Dry Crush Circuit & Dry Stoker Circuit run of mine coal pile	32	6.2	7.18	0.60	0.786	0.275
Dry Crush Circuit reject rock pile***	40	1.6	1.85	0.01	0.003	0.001
Oversized coal storage pile	42O	6.2	7.18	0.25	0.327	0.115
Dry Stoker Circuit oversize (stoker) coal pile	53	6.2	7.18	0.01	0.013	0.005
Dry Stoker Circuit fines coal pile	55	6.2	7.18	0.01	0.013	0.005
				Totals	**14.75**	**5.16**

Methodology
*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)
**Maximum anticipated pile size (acres) provided by the source.
***Assuming reject material is similar to crushed limestone
****Assuming clean coal is similar to coal as received by power plant
Uncontrolled PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)
Uncontrolled PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Attachment A: Emissions Calculations
Coal Preparation/Processing Plant Unpaved Roads (fugitive)

Company Name: **Peabody Midwest Mining LLC - Bear Run Mine**
Source Address: **7255 East CR 600 South, Carlisle, IN 47838**
Minor Source Operating Permit No.: **M153-28491-00011**
Significant Permit Revision No.: **153-33173-00011**
Permit Reviewer: **Kristen Willoughby**

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Maximum Raw Coal Receiving Capacity to plant =	14,000,000	tons/yr	
Maximum Material Handling Capacity by Front-end Loader =	3,500,000	tons/yr	(25% handled by front-end loaders; 75% directly dumped into process feeder bins)
Maximum Raw Coal Receiving Capacity to Dry Crush/Dry Stoker Circuits =	1,918,500		
Maximum Material Handling Capacity by Front-end Loader =	479,625	tons/yr	(25% handled by front-end loaders; 75% directly dumped into process feeder bins)
Maximum Refuse Shipping Capacity by Truck =	3,360,000	tons/yr	
Maximum Coal Shipping Capacity by Truck =	536,000	tons/yr	(5% of coal will be shipped by truck; 95% of coal will be shipped by rail)

Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
Coal Mine Truck to Plant Enter Full	Dump truck (200 ton load)	107.5	167.5	275.0	8.4E+04	2.3E+07	560	0.106	8864.8
Coal Mine Truck Leave Plant Empty	Dump truck (200 ton load)	107.5	0	107.5	8.4E+04	9.0E+06	560	0.106	8864.8
Front-end Loader Full	Front-end loader (3 CY)	105.0	24.0	129.0	1.5E+05	1.9E+07	200	0.038	5524.0
Front-end Loader Empty	Front-end loader (3 CY)	105.0	0	105.0	1.5E+05	1.5E+07	200	0.038	5524.0
Coal Mine Truck Dry Crush/Dry Stoker Circuits Enter Full	Dump truck (200 ton load)	107.5	167.5	275.0	1.1E+04	3.1E+06	1230	0.233	2668.2
Coal Mine Truck Leave Dry Crush/Dry Stoker Circuits Empty	Dump truck (200 ton load)	107.5	0	107.5	1.1E+04	1.2E+06	1230	0.233	2668.2
Front-end Loader Full	Front-end loader (3 CY)	105.0	24.0	129.0	2.0E+04	2.6E+06	200	0.038	757.0
Front-end Loader Empty	Front-end loader (3 CY)	105.0	0	105.0	2.0E+04	2.1E+06	200	0.038	757.0
Refuse Transport Truck Leave Full	Dump truck (200 ton load)	107.5	167.5	275.0	2.0E+04	5.5E+06	527	0.100	2002.2
Refuse Transport Truck Enter Empty	Dump truck (200 ton load)	107.5	0	107.5	2.0E+04	2.2E+06	1087	0.206	4129.7
Coal Transport Truck Leave Full	Freight Truck (6 axles)	15.0	40.0	55.0	1.3E+04	7.4E+05	1430	0.271	3629.2
Coal Transport Truck Enter Empty	Freight Truck (6 axles)	15.0	0	15.0	1.3E+04	2.0E+05	1070	0.203	2715.5
Total					**5.9E+05**	**8.4E+07**			**4.8E+04**

Average Vehicle Weight Per Trip =	142.3	tons/trip
Average Miles Per Trip =	0.082	miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	5.1	5.1	5.1	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Coal Mine Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	142.3	142.3	142.3	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]
Mitigated Emission Factor, Eext = E * [(365 - P)/365]

where P =	125	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	15.29	3.94	0.39	lb/mile
Mitigated Emission Factor, Eext =	10.05	2.59	0.26	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Coal Mine Truck to Plant Enter Full	Dump truck (200 ton load)	67.76	17.48	1.75	44.55	11.49	1.15	22.28	5.75	0.57
Coal Mine Truck Leave Plant Empty	Dump truck (200 ton load)	67.76	17.48	1.75	44.55	11.49	1.15	22.28	5.75	0.57
Front-end Loader Full	Front-end loader (3 CY)	42.22	10.89	1.09	27.76	7.16	0.72	13.88	3.58	0.36
Front-end Loader Empty	Front-end loader (3 CY)	42.22	10.89	1.09	27.76	7.16	0.72	13.88	3.58	0.36
Coal Mine Truck Dry Crush/Dry Stoker Circuits Enter Full	Dump truck (200 ton load)	20.39	5.26	0.53	13.41	3.46	0.35	6.70	1.73	0.17
Coal Mine Truck Leave Dry Crush/Dry Stoker Circuits Empty	Dump truck (200 ton load)	20.39	5.26	0.53	13.41	3.46	0.35	6.70	1.73	0.17
Front-end Loader Full	Front-end loader (3 CY)	5.79	1.49	0.15	3.80	0.98	0.10	1.90	0.49	0.05
Front-end Loader Empty	Front-end loader (3 CY)	5.79	1.49	0.15	3.80	0.98	0.10	1.90	0.49	0.05
Refuse Transport Truck Leave Full	Dump truck (16 CY)	15.30	3.95	0.39	10.06	2.60	0.26	5.03	1.30	0.13
Refuse Transport Truck Enter Empty	Dump truck (16 CY)	31.56	8.14	0.81	20.75	5.35	0.54	10.38	2.68	0.27
Coal Transport Truck Leave Full	Freight Truck (6 axles)	27.74	7.16	0.72	18.24	4.71	0.47	9.12	2.35	0.24
Coal Transport Truck Enter Empty	Freight Truck (6 axles)	20.76	5.35	0.54	13.65	3.52	0.35	6.82	1.76	0.18
	Totals	**367.68**	**94.85**	**9.49**	**241.76**	**62.37**	**6.24**	**120.88**	**31.18**	**3.12**

Methodology
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Maximum Capacity (tons/yr)] / [Maximum Weight of Load (tons/trip)]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Attachment A: Emissions Calculations
Coal Mining (fugitive)

Company Name: **Peabody Midwest Mining LLC - Bear Run Mine**
Source Address: **7255 East CR 600 South, Carlisle, IN 47838**
Minor Source Operating Permit No.: **M153-28491-00011**
Significant Permit Revision No.: **153-33173-00011**
Permit Reviewer: **Kristen Willoughby**

The following calculations determine the amount of emissions created by mining activities at the coal mine, based on 8,760 hours of use and USEPA's AP-42 Section 11.9 for Western Surface Coal Mining

Blasting Emission Factor

$Ef = 0.000014(A)^{1.5}$

where Ef = emission factor (lb/blast)

A =	30193	horizontal area (ft2), with blasting depth less than or equal to 70 ft
Ef =	73.4	lb/blast

Process	Maximum Capacity (for 8,760 hours/year)		PM Emission Factor	Scaling Factor for PM10	Scaling Factor for PM2.5	PTE of PM (tons/year)	PTE of PM10 (tons/year)	PTE of PM2.5 (tons/year)
Drilling	84,453	holes/yr	1.3 lb/hole	0.52	0.03	54.89	28.55	1.65
Blasting	1,141	blasts/yr	73.4 lb/blast	0.52	0.03	41.91	21.79	1.26
Topsoil Removal	1,494,722	tons/yr	0.058 lb/ton	0.52	0.03	43.35	22.54	1.30
Loading Overburden (T/S)	92,316,979	tons/yr	0.037 lb/ton	0.52	0.03	1707.86	888.09	51.24
Loading Overburden (D/L)	142,863,320	tons/yr	0.037 lb/ton	0.52	0.03	2642.97	1374.35	79.29
Unloading Overburden (T/S)	92,316,979	tons/yr	0.002 lb/ton	0.52	0.03	92.32	48.00	2.77
Unloading Overburden (D/L)	142,863,320	tons/yr	0.002 lb/ton	0.52	0.03	142.86	74.29	4.29
Loading Coal	15,918,500	tons/yr	0.028 lb/ton	0.52	0.03	222.86	115.89	6.69
					Total	**4949.03**	**2573.49**	**148.47**

Methodology
Uncontrolled PTE (tons/yr) = (Maximum Capacity (units/yr)) * (Emission Factor (lb/unit)) * (ton/2000 lbs)
Emission factors from AP-42 Section 11.9 for Western Surface Coal Mining
*Scaling Factors for PM10 and PM2.5 assumed equal to those for blasting

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Attachment A: Emissions Calculations
Coal Mine Storage Piles (fugitive)

Company Name: **Peabody Midwest Mining LLC - Bear Run Mine**
Source Address: **7255 East CR 600 South, Carlisle, IN 47838**
Minor Source Operating Permit No.: **M153-28491-00011**
Significant Permit Revision No.: **153-33173-00011**
Permit Reviewer: **Kristen Willoughby**

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
where Ef = emission factor (lb/acre/day)
s = silt content (wt %)
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

Material Storage Pile	Silt Content (wt %)*	Emission Factor (lb/acre/day)	Maximum Anticipated Pile Size (acres)**	PTE of PM (tons/yr)	PTE of PM10/PM2.5 (tons/yr)
Topsoil and subsoil piles***	7.5	8.68	1.00	1.584	0.554
Overburden spoil piles	7.5	8.68	14.00	22.180	7.763
Raw coal piles	6.2	7.18	1.00	1.310	0.458
			Totals	**25.07**	**8.78**

Methodology
PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)
PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%
*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)
**Maximum anticipated pile size (acres) provided by the source. Overburden spoils piles land area assumed to be 3000 ft long by 200 ft wide.
***Assuming topsoil and subsoil are similar to overburden

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Attachment A: Emissions Calculations
Coal Mine Unpaved Roads (fugitive)

Company Name: **Peabody Midwest Mining LLC - Bear Run Mine**
Source Address: **7255 East CR 600 South, Carlisle, IN 47838**
Minor Source Operating Permit No.: **M153-28491-00011**
Significant Permit Revision No.: **153-33173-00011**
Permit Reviewer: **Kristen Willoughby**

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

		Anticipated Breakdown		
	North Pit and South Pit Combined	North Pit	South Pit	
		60.0%	40.0%	
Maximum Raw Coal Shipping Capacity =	14,000,000	8,400,000	5,600,000	tons/yr
Maximum Refuse Shipping Capacity by Truck =	3,360,000	2,016,000	1,344,000	
Maximum Raw Coal Shipping to Dry Crush/Dry Stoker Circuits =	1,918,500	1,151,100	767,400	
Maximum Overburden Transport Capacity =	92,316,979	55,390,187	36,926,792	tons/yr
Maximum Topsoil and Subsoil Transport Capacity =	1,494,722	896,833	597,889	tons/yr

Location	Process	Vehicle Type	Maximum Weight of Vehicle (tons)	Maximum Weight of Load (tons)	Maximum Weight of Vehicle and Load (tons/trip)	Maximum trips per year (trip/yr)	Total Weight driven per year (ton/yr)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/yr)
North Pit	Coal Mine Truck Leave Full to Plant	Dump truck (200 ton load)	107.5	167.5	275.0	5.0E+04	1.4E+07	8820	1.670	83772.0
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	107.5	0	107.5	5.0E+04	5.4E+06	8820	1.670	83772.0
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	107.5	0	107.5	1.2E+04	1.3E+06	1720	0.326	3920.8
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	107.5	167.5	275.0	1.2E+04	3.3E+06	10540	1.996	24026.1
	Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	107.5	167.5	275.0	6.9E+03	1.9E+06	6420	1.216	8356.0
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	107.5	0	107.5	6.9E+03	7.4E+05	6420	1.216	8356.0
	Overburden Truck Leave Full	Dump truck (200 ton load)	150.0	240.0	390.0	2.3E+05	9.0E+07	2000	0.379	87421.4
	Overburden Truck Enter Empty	Dump truck (200 ton load)	150.0	0	150.0	2.3E+05	3.5E+07	2000	0.379	87421.4
	Topsoil and Subsoil Truck Leave Full	Dump truck (200 ton load)	150.0	240.0	390.0	3.7E+03	1.5E+06	3000	0.568	2123.2
	Topsoil and Subsoil Truck Enter Empty	Dump truck (200 ton load)	150.0	0	150.0	3.7E+03	5.6E+05	3000	0.568	2123.2
South Pit	Coal Mine Truck Leave Full to Plant	Dump truck (200 ton load)	107.5	167.5	275.0	3.3E+04	9.2E+06	26804	5.077	169722.3
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	107.5	0	107.5	3.3E+04	3.6E+06	26804	5.077	169722.3
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	107.5	0	107.5	8.0E+03	8.6E+05	1720	0.326	2613.8
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	107.5	167.5	275.0	8.0E+03	2.2E+06	27102	5.133	41186.2
	Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	107.5	167.5	275.0	4.6E+03	1.3E+06	29206	5.531	25342.2
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	107.5	0	107.5	4.6E+03	4.9E+05	29206	5.531	25342.2
	Overburden Truck Leave Full	Dump truck (240 ton load)	162.0	240.0	402.0	1.5E+05	6.2E+07	2000	0.379	58280.9
	Overburden Truck Enter Empty	Dump truck (240 ton load)	162.0	0	162.0	1.5E+05	2.5E+07	2000	0.379	58280.9
	Topsoil and Subsoil Truck Leave Full	Dump truck (240 ton load)	162.0	240.0	402.0	2.5E+03	1.0E+06	3000	0.568	1415.5
	Topsoil and Subsoil Truck Enter Empty	Dump truck (240 ton load)	162.0	0	162.0	2.5E+03	4.0E+05	3000	0.568	1415.5
		Total				**1.0E+06**	**2.6E+08**			**9.4E+05**

Average Vehicle Weight Per Trip = 255.8 tons/trip
Average Miles Per Trip = 0.933 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	5.1	5.1	5.1	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Coal Mine Plant Road)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2)
W =	255.8	255.8	255.8	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	19.90	5.13	0.51	lb/mile
Mitigated Emission Factor, Eext =	13.09	3.38	0.34	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Location	Process	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
North Pit	Coal Mine Truck Leave Full to Plant	Dump truck (200 ton load)	833.65	215.06	21.51	548.15	141.41	14.14	274.08	70.70	7.07
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	833.65	215.06	21.51	548.15	141.41	14.14	274.08	70.70	7.07
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	39.02	10.07	1.01	25.66	6.62	0.66	12.83	3.31	0.33
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	239.09	61.68	6.17	157.21	40.56	4.06	78.61	20.28	2.03
	Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	83.15	21.45	2.15	54.68	14.11	1.41	27.34	7.05	0.71
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	83.15	21.45	2.15	54.68	14.11	1.41	27.34	7.05	0.71
	Overburden Truck Leave Full	Dump truck (200 ton load)	869.97	224.43	22.44	572.03	147.57	14.76	286.02	73.78	7.38
	Overburden Truck Enter Empty	Dump truck (200 ton load)	869.97	224.43	22.44	572.03	147.57	14.76	286.02	73.78	7.38
	Topsoil and Subsoil Truck Leave Full	Dump truck (200 ton load)	21.13	5.45	0.55	13.89	3.58	0.36	6.95	1.79	0.18
	Topsoil and Subsoil Truck Enter Empty	Dump truck (200 ton load)	21.13	5.45	0.55	13.89	3.58	0.36	6.95	1.79	0.18
South Pit	Coal Mine Truck Leave Full to Plant	Dump truck (200 ton load)	1688.98	435.71	43.57	1110.56	286.49	28.65	555.28	143.25	14.32
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	1688.98	435.71	43.57	1110.56	286.49	28.65	555.28	143.25	14.32
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	26.01	6.71	0.67	17.10	4.41	0.44	8.55	2.21	0.22
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	409.86	105.73	10.57	269.50	69.52	6.95	134.75	34.76	3.48
	Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	252.19	65.06	6.51	165.82	42.78	4.28	82.91	21.39	2.14
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	252.19	65.06	6.51	165.82	42.78	4.28	82.91	21.39	2.14
	Overburden Truck Leave Full	Dump truck (240 ton load)	579.98	149.62	14.96	381.36	98.38	9.84	190.68	49.19	4.92
	Overburden Truck Enter Empty	Dump truck (240 ton load)	579.98	149.62	14.96	381.36	98.38	9.84	190.68	49.19	4.92
	Topsoil and Subsoil Truck Leave Full	Dump truck (240 ton load)	14.09	3.63	0.36	9.26	2.39	0.24	4.63	1.19	0.12
	Topsoil and Subsoil Truck Enter Empty	Dump truck (240 ton load)	14.09	3.63	0.36	9.26	2.39	0.24	4.63	1.19	0.12
		Totals	**9400.25**	**2425.00**	**242.50**	**6180.99**	**1594.52**	**159.45**	**3090.49**	**797.26**	**79.73**

Methodology
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Maximum Capacity (tons/yr)] / [Maximum Weight of Load (tons/trip)]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: James F. Tolen
Peabody Midwest Mining LLC – Bear Run Mine
7100 Eagle Crest Blvd., Suite 100
Evansville, IN 47715

DATE: June 20, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Significant Permit Revision to a Minor Source Operating Permit (MSOP)
153-33173-00011

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Bryce West
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

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Commissioner

June 20, 2013

TO: Carlisle Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Peabody Midwest Mining LLC – Bear Run Mine
Permit Number: 153-33173-00011

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	VHAUN 6/20/2013 Peabody Midwest Mining LLC - Bear Run Mine 153-33173-00011 FINAL		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		James Tolen Peabody Midwest Mining LLC - Bear Run Mine 7100 Eagle Crest Blvd, Ste 100 Evansville IN 47715 (Source CAATS) Confirmed Delivery									
2		Bryce West Peabody Midwest Mining LLC - Bear Run Mine 7100 Eagle Crest Blvd, Ste 100 Evansville IN 47715 *(RO CAATS)*									
3		Sullivan City Council and Mayors Office 32 N. Court St. Sullivan IN 47882 *(Local Official)*									
4		Sullivan County Health Department 31 N Court Street Sullivan IN 47882-1509 *(Health Department)*									
5		Sullivan County Commissioners 100 Courthouse Square Sullivan IN 47882-1593 *(Local Official)*									
6		Mr. Richard Monday 545 E. Margaret Dr. Terre Haute IN 47801 *(Affected Party)*									
7		Carlisle Public Library 201 South Ledgerwood Street Carlisle IN 47838 *(Library)*									
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