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Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

To:	Interested Parties
Date:	July 3, 2024
From:	Jenny Acker, Chief Permits Branch Office of Air Quality
Source Name:	Peabody Midwest Mining LLC Bear Run Mine
Permit Level:	MSOP Administrative Amendment
Permit Number:	153-47966-00011
Source Location:	7255 E CR 600 S, Carlisle, IN 47838
Type of Action Taken:	Changes that are administrative in nature

Notice of Decision: Approval

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

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, choose Search Option **by Permit Number**, then enter permit 47966. This search will also provide the application received date and **final** permit issuance date.

The final decision is also available via IDEM's Virtual File Cabinet (VFC). Please go to: https://www.in.gov/idem and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

(continues on next page)

If you would like to request a paper copy of the permit document, please contact IDEM's Office of Records Management:

IDEM - Office of Records Management
Indiana Government Center North, Room 1207
100 North Senate Avenue
Indianapolis, IN 46204
Phone: (317) 232-8667
Fax: (317) 233-6647
Email: IDEMFILEROOM@idem.in.gov

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Indiana Office of Administrative Law Proceedings, 100 N. Senate Avenue Suite N802, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Indiana Office of Administrative Law Proceedings (OALP)
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OALP 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 OALP 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.

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Governor

Brian C. Rockensuess
Commissioner

July 3, 2024

Ms. Karen Risner
Peabody Midwest Mining LLC - Bear Run Mine
566 Dickeyville Rd.
Lynnville, IN 47619

Re: 153-47966-00011
Administrative Amendment to
MSOP Renewal No. M153-35601-00011

Dear Ms. Risner:

Peabody Midwest Mining LLC - Bear Run Mine was issued a Minor Source Operating Permit (MSOP) Renewal No. M153-35601-00011 on October 8, 2015 for a stationary coal mine collocated with a coal preparation plant located at 7255 East CR 600 South, Carlisle, Indiana 47838. On June 17, 2024, the Office of Air Quality (OAQ) received an application from the source requesting to replace equipment associated with the limestone processing plant. As a result of product quality and equipment productivity issues, Bear Run Mine is replacing the two existing screens with two horizontal screening units and replacement of the two existing crushers with a jaw crusher and a cone crusher, all manufactured by Superior Industries.

Pursuant to the provisions of 326 IAC 2-6.1-6(d), the permit is hereby administratively amended as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect.

Please find attached the entire MSOP as amended. The permit references the below listed attachment(s). Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this amendment:

Attachment A: Fugitive Dust Control Plan
Attachment B: 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation and Processing Plants
Attachment C: 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants

Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Previously issued approvals for this source are also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the application and permit is also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: https://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air

permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions regarding this matter, please contact Andrew Belt, 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) 232-3217 or (800) 451-6027, and ask for Andrew Belt or (317) 232-3217.

Sincerely,

Brian Williams, Section Chief
Permits Branch
Office of Air Quality

Attachment(s): Updated Permit and Technical Support Document

cc: File - Sullivan County
Sullivan County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch

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Minor Source Operating Permit Renewal
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.: M153-35601-00011 Master Agency Interest ID.: 100781	
Issued by: Original signed by: Jenny Acker, Section Chief Permits Branch, Office of Air Quality	Issuance Date: October 8, 2015 Expiration Date: October 8, 2025

Significant Permit Revision No.: 153-47422-00011, issued on May 15, 2024

Administrative Amendment No.: 153-47966-00011	
Issued by: Brian Williams, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 3, 2024 Expiration Date: October 8, 2025

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Attachment B: 40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation and Processing Plants
Attachment C: 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants

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) 922-1048
SIC Code:	1221 (Bituminous Coal and Lignite Surface Mining) 1422 (Crushed and Broken Limestone)
County Location:	Sullivan
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset 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, modified in 2010 for increased production, and approved in 2024 for modification to add existing storage piles and update coal shipping road emissions, 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) two (2) raw coal storage piles, exhausting to the atmosphere prior to the process circuit and dry crush circuit;

(10) 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, modified in 2010 for increased production, and approved in 2024 for modification to update the material handling, storage pile, and road emissions, 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) 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;

(B) 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;

(C) 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;

(D) 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;

(E) 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;

(F) 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;

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

(H) 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;

(I) 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;

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

(K) 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;

(L) 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;

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

(N) 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;

(O) 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;

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

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

(R) 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;

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

(T) 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;

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

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

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

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

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

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

(AA) 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;

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

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

(DD) 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;

(EE) 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;

(FF) 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;

(GG) 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;

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

Under 40 CFR 60, Subpart Y, these are considered affected facilities.

(2) Dry Crush Circuit

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

(B) 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;

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

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

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

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

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

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

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

(J) 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;

(K) 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;

(L) 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;

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

(N) 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;

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

Under 40 CFR 60, Subpart Y, these are considered affected facilities.

(d) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(5) One (1) screen, identified as Unit 45a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(6) One (1) finesize underbelly conveyor, identified as Unit 45b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(7) One (1) finesize underbelly conveyor, identified as Unit 45c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(8) One (1) midsize side conveyor, identified as Unit 45d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(9) One (1) topsize side conveyor, identified as Unit 45e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(10) One (1) crusher, identified as Unit 46a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(11) One (1) product conveyor, identified as Unit 46b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(12) One (1) screen, identified as Unit 47a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(13) One (1) finesize underbelly conveyor, identified as Unit 47b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(14) One (1) finesize underbelly conveyor, identified as Unit 47c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(15) One (1) midsize side conveyor, identified as Unit 47d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(16) One (1) oversize side conveyor, identified as Unit 47e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(17) Five (5) fixed conveyors, identified as Units 48, 49, 50, 51, and 52, with a maximum capacity of 350 tons per hour, each, and exhausting to the atmosphere.

(18) Limestone storage piles

(19) Unpaved roads

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

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, M153-35601-00011, is issued for a fixed term of ten (10) 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) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, 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.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

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

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

(a) All terms and conditions of permits established prior to M153-35601-00011 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. The analog instrument shall be capable of measuring values outside of the normal range.

(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) 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) open pit surface coal mining operation, approved for construction in 2005, modified in 2010 for increased production, and approved in 2024 for modification to add existing storage piles and update coal shipping road emissions, 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) two (2) raw coal storage piles, exhausting to the atmosphere prior to the process circuit and dry crush circuit;

(10) 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 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.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 EMISSIONS UNIT 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, modified in 2010 for increased production, and approved in 2024 for modification to update the material handling, storage pile, and road emissions, 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) 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;

(B) 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;

(C) 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;

(D) 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;

(E) 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;

(F) 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;

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

(H) 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;

(I) 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;

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

(K) 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;

(L) 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;

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

(N) 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;

(O) 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;

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

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

(R) 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;

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

(T) 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;

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

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

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

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

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

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

(AA) 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;

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

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

(DD) 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;

(EE) 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;

(FF) 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;

(GG) 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;

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

Under 40 CFR 60, Subpart Y, these are considered affected facilities.

(2) Dry Crush Circuit

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

(B) 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;

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

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

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

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

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

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

(I) one (1) crusher, identified as Unit 41, with a maximum capacity of 2000 tons

per hour, exhausting to the atmosphere;

(J) 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;

(K) 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;

(L) 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;

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

(N) 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;

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

Under 40 CFR 60, Subpart Y, these are considered affected facilities.

(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 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

Unit ID	Description	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
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.2.2 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.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and any 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 [326 IAC 2-6.1-5(a)(2)]

D.2.4 Fugitive Particulate Matter Control

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

D.2.5 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, and D.2.2. 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.2.6 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 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.2.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.5, 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.2.6, 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 contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(5) One (1) screen, identified as Unit 45a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(6) One (1) finesize underbelly conveyor, identified as Unit 45b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(7) One (1) finesize underbelly conveyor, identified as Unit 45c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(8) One (1) midsize side conveyor, identified as Unit 45d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(9) One (1) topsize side conveyor, identified as Unit 45e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(10) One (1) crusher, identified as Unit 46a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(11) One (1) product conveyor, identified as Unit 46b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(12) One (1) screen, identified as Unit 47a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(13) One (1) finesize underbelly conveyor, identified as Unit 47b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(14) One (1) finesize underbelly conveyor, identified as Unit 47c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(15) One (1) midsize side conveyor, identified as Unit 47d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(16) One (1) oversize side conveyor, identified as Unit 47e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(17) Five (5) fixed conveyors, identified as Units 48, 49, 50, 51, and 52, with a maximum capacity of 350 tons per hour, each, and exhausting to the atmosphere.

(18) Limestone storage piles

(19) Unpaved roads

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

(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.3.1 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)
44a	Hopper	350	64.76
44b	Crusher	350	64.76
44c	Product Conveyor	350	64.76
44d	Side Conveyor	350	64.76
45a	Screen	350	64.76
45b	Finesize Underbelly Conveyor	350	64.76
45c	Finesize Underbelly Conveyor	350	64.76
45d	Midsize Side Conveyor	350	64.76
45e	Topsize Side Conveyor	350	64.76
46a	Crusher	350	64.76
46b	Product Conveyor	350	64.76
47a	Screen	350	64.76
47b	Finesize Underbelly Conveyor	350	64.76
47c	Finesize Underbelly Conveyor	350	64.76
47d	Midsize Side Conveyor	350	64.76
47e	Oversize Side Conveyor	350	64.76
48	Fixed Conveyor	350	64.76
49	Fixed Conveyor	350	64.76
50	Fixed Conveyor	350	64.76
51	Fixed Conveyor	350	64.76
52	Fixed Conveyor	350	64.76

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

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.3.3 Visible Emissions Notations

(a) Visible emission notations of the process emission points for the equipment and activities associated with the limestone processing operation shall be performed once per day 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 and 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.3.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.3, the Permittee shall maintain daily records of the visible emission notations of the process emission points for the equipment and activities associated with limestone processing operation. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g., the process did not operate that day).

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

SECTION E.1 NSPS

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, modified in 2010 for increased production, and approved in 2024 for modification to update the material handling, storage pile, and road emissions, 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) 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;

(B) 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;

(C) 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;

(D) 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;

(E) 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;

(F) 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;

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

(H) 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;

(I) 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;

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

(K) 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;

(L) 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;

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

(N) 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;

(O) 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;

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

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

(R) 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;

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

(T) 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;

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

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

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

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

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

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

(AA) 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;

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

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

(DD) 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;

(EE) 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;

(FF) 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;

(GG) 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;

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

Under 40 CFR 60, Subpart Y, these are considered affected facilities.

(2) Dry Crush Circuit

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

(B) 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;

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

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

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

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

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

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

(I) one (1) crusher, identified as Unit 41, with a maximum capacity of 2000 tons

per hour, exhausting to the atmosphere;

(J) 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;

(K) 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;

(L) 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;

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

(N) 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;

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

Under 40 CFR 60, Subpart Y, these are considered affected facilities.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-6.1-5(a)(1)]

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 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, for the above listed emissions units, except as otherwise specified in 40 CFR Part 60, Subpart Y.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports 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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.1.2 Standards of Performance for Coal Preparation and Processing Plants NSPS [326 IAC 12] [40 CFR Part 60, Subpart Y]

Pursuant to 40 CFR Part 60, Subpart Y the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Y, which are incorporated by reference as 326 IAC 12 (included as Attachment B to this permit), for the above listed emissions units as specified as follows.

(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

SECTION E.2 NSPS

Emissions Unit Description:

(d) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(5) One (1) screen, identified as Unit 45a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(6) One (1) finesize underbelly conveyor, identified as Unit 45b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(7) One (1) finesize underbelly conveyor, identified as Unit 45c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(8) One (1) midsize side conveyor, identified as Unit 45d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(9) One (1) topsize side conveyor, identified as Unit 45e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(10) One (1) crusher, identified as Unit 46a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(11) One (1) product conveyor, identified as Unit 46b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(12) One (1) screen, identified as Unit 47a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(13) One (1) finesize underbelly conveyor, identified as Unit 47b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(14) One (1) finesize underbelly conveyor, identified as Unit 47c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(15) One (1) midsize side conveyor, identified as Unit 47d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(16) One (1) oversize side conveyor, identified as Unit 47e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(17) Five (5) fixed conveyors, identified as Units 48, 49, 50, 51, and 52, with a maximum capacity of 350 tons per hour, each, and exhausting to the atmosphere.

(18) Limestone storage piles

(19) Unpaved roads

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-6.1-5(a)(1)]

E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 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, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart OOO.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports 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

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.2.2 Nonmetallic Mineral Processing Plants NSPS [326 IAC 12] [40 CFR Part 60, Subpart OOO]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart OOO (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.670(a)(1), (d), (e), and (f)
(2) 40 CFR 60.671
(3) 40 CFR 60.672
(4) 40 CFR 60.673
(5) 40 CFR 60.674(b)
(6) 40 CFR 60.675
(7) 40 CFR 60.676(a), (b)(1), (f), (g), (h), (i), (j), and (k)
(8) Table 1 to Subpart OOO
(9) Table 3 to Subpart OOO

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

E.2.3 Testing Requirements [326 IAC 2-1.1-11]

In order to document the compliance status with Condition E.2.2, the Permittee shall perform the initial testing required under 40 CFR 60, Subpart OOO, utilizing methods as approved by the Commissioner. The Permittee shall perform the fugitive emission testing at least once every five (5) years from the date of the most recent valid fugitive emission testing compliance demonstration. Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing 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) 434-8500
MSOP #:	M153-35601-00011

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 M153-35601-00011.
□ not in compliance with the requirements of MSOP M153-35601-00011.

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:

_____
_____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for an Administrative Amendment to a Minor Source Operating Permit (MSOP) Renewal

Source Description and Location

Source Name:	**Peabody Midwest Mining LLC - Bear Run Mine**
Source Location:	**7255 East CR 600 South, Carlisle, Indiana 47838**
County:	**Sullivan**
SIC Code:	**1221 (Bituminous Coal and Lignite Surface Mining)** **1422 (Crushed and Broken Limestone)**
Operation Permit No.:	**M153-35601-00011**
Operation Permit Issuance Date:	**October 8, 2015**
Administrative Amendment No.:	**153-47966-00011**
Permit Reviewer:	**Andrew Belt**

Existing Approvals

The source was issued MSOP Renewal No. M153-35601-00011 on October 8, 2015. The source has since received the following approval:

(a) Significant Permit Revision No. 153-47422-00011, issued on May 15, 2024.

County Attainment Status

The source is located in Sullivan County.

Pursuant to amendments to Indiana Code IC 13-17-3-14, effective July 1, 2023, a federal regulation that classifies or amends a designation of attainment, nonattainment, or unclassifiable for any area in Indiana under the federal Clean Air Act is effective and enforceable in Indiana on the effective date of the federal regulation.

Pollutant	Designation
SO_2	Unclassifiable or attainment effective April 9, 2018, for the 2010 primary 1-hour SO_2 standard. Better than national secondary standards effective March 3, 1978.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective January 16, 2018, for the 2015 8-hour ozone standard.
$PM_{2.5}$	Unclassifiable or attainment effective April 15, 2015, for the 2012 annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Unclassifiable or attainment effective January 29, 2012, for the 2010 NO_2 standard.
Pb	Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x 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 NO_x emissions were reviewed pursuant to the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Sullivan County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

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

Fugitive Emissions

The source includes a coal preparation plant that supports the coal mine. This type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B). However, there is an applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980 (40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants and Processing Plants); therefore, fugitive emissions from the coal preparation plant are counted toward the determination of PSD, Emission Offset, 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.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit (326 IAC 2-7) and MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled

that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Source Status - Existing Source

This table reflects the unrestricted potential emissions of the source prior to the administrative amendment. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions Prior to Administrative Amendment (tons/year)							
	PM[1]	**PM_{10}[1]**	**$PM_{2.5}$[1, 2]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Total HAPs**
Total PTE of Entire Source Excluding Fugitives*	180.54	70.29	45.93	0.00	0.00	0.00	0.00	0.00
Fugitives from NSPS/NESHAP Source Category (Coal Preparation Plants and Processing Plants)**	54.12	14.61	3.69	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	**234.66**	**84.91**	**49.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Title V Major Source Thresholds	--	100	100	100	100	100	100	25
Total PTE of Entire Source Including Source-Wide Fugitives*	**13,515.67**	**4,812.33**	**428.92**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
MSOP Thresholds	25	25	25	25	25	25	< 100	< 25

[1]Under the Part 70 Permit program (40 CFR 70), PM_{10} and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.

*Fugitive HAP emissions are always included in the source-wide emissions.

**The source includes a coal preparation plant that supports the coal mine. This type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B). However, there is an applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980 (40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants and Processing Plants); therefore, fugitive emissions from the coal preparation plant are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is not a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are 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.

(c) These emissions are based on the TSD of Significant Permit Revision No. 153-47422-00011, issued on May 15, 2024.

Description of Amendment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Peabody Midwest Mining LLC - Bear Run Mine on June 17, 2024, relating to replacing equipment associated with the limestone processing plant. As a result of product quality and equipment productivity issues, Bear Run Mine is replacing the two existing screens with two horizontal screening units and replacement of the two existing crushers with a jaw crusher and a cone crusher, all manufactured by Superior Industries.

The following is a list of the new emission units:

(a) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(5) One (1) screen, identified as Unit 45a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(6) One (1) finesize underbelly conveyor, identified as Unit 45b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(7) One (1) finesize underbelly conveyor, identified as Unit 45c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(8) One (1) midsize side conveyor, identified as Unit 45d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(9) One (1) topsize side conveyor, identified as Unit 45e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(10) One (1) crusher, identified as Unit 46a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(11) One (1) product conveyor, identified as Unit 46b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(12) One (1) screen, identified as Unit 47a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(13) One (1) finesize underbelly conveyor, identified as Unit 47b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(14) One (1) finesize underbelly conveyor, identified as Unit 47c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(15) One (1) midsize side conveyor, identified as Unit 47d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(16) One (1) oversize side conveyor, identified as Unit 47e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(17) Five (5) fixed conveyors, identified as Units 48, 49, 50, 51, and 52, with a maximum capacity of 350 tons per hour, each, and exhausting to the atmosphere.

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

As part of this permitting action, the following emission units are being removed from the permit:

(a) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.

(5) One (1) hopper, identified as Unit 45a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(6) One (1) screener, identified as Unit 45b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(7) One (1) collection conveyor, identified as Unit 45c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(8) One (1) finesize side conveyor, identified as Unit 45d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(9) One (1) midsize side conveyor, identified as Unit 45e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(10) One (1) oversize tail conveyor, identified as Unit 45f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(11) One (1) hopper, identified as Unit 46a, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.

(12) One (1) crusher, identified as Unit 46b, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.

(13) One (1) product conveyor, identified as Unit 46c, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.

(14) One (1) hopper, identified as Unit 47a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(15) One (1) main conveyor, identified as Unit 47b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(16) One (1) screen, identified as Unit 47c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(17) One (1) finesize tail conveyor, identified as Unit 47d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(18) One (1) midsize side conveyor, identified as Unit 47e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(19) One (1) oversize side conveyor, identified as Unit 47f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.

(20) Two (2) wheeled conveyors, identified as Units 48 and 49, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.

(21) Three (3) tracked conveyors, identified as Units 50, 51, and 52, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

Enforcement Issues

There are no pending enforcement actions related to this administrative amendment.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – MSOP Administrative Amendment

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the administrative amendment. If the control equipment has been

determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	PTE Increase of the Modified Emission Unit(s)/Process(es) (ton/year)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$[1]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Single HAP[2]**	**Total HAPs**
PTE Before Modification (Limestone Crushing Circuit)	114.64	42.05	42.05	0.00	0.00	0.00	0.00	0.00	0.00
PTE After Modification (Limestone Crushing Circuit)	101.79	37.22	37.22	0.00	0.00	0.00	0.00	0.00	0.00
PTE Increase (Limestone Crushing Circuit)	*-12.85*	*-4.83*	*-4.83*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
PTE Before Modification (Limestone Unpaved Roads)	1,242.68	320.58	32.06	0.00	0.00	0.00	0.00	0.00	0.00
PTE After Modification (Limestone Unpaved Roads)	1,087.34	280.50	28.05	0.00	0.00	0.00	0.00	0.00	0.00
PTE Increase (Limestone Unpaved Roads)	*-155.33*	*-40.07*	*-4.01*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Total PTE Increase of the Modified Emission Unit(s)/Process	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

[1]$PM_{2.5}$ listed is direct $PM_{2.5}$.
[2]Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the administrative amendment.

Pursuant to 326 IAC 2-6.1-6(d)(8), this change to the permit is considered an administrative amendment because the permit is amended to incorporate a modification that adds an emissions unit(s) of the same type that is(are) already permitted or replaces an existing unit(s) and that will comply with the same applicable requirements and permit terms and conditions as the existing emission unit(s), and the modification does not result in a potential to emit greater than the thresholds in 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), or 326 IAC 2-7 (Part 70 Operating Permit).

PTE of the Entire Source After Issuance of the MSOP Administrative Amendment

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions after Issuance (ton/year) (Uncontrolled/Unlimited)							
	PM[1]	**PM_{10}[1]**	**$PM_{2.5}$[1, 2]**	**SO_2**	**NO_X**	**VOC**	**CO**	**Total HAPs**
Total PTE of Entire Source Excluding Fugitives*	167.69	65.46	41.10	0.00	0.00	0.00	0.00	0.00
Fugitives from NSPS/NESHAP Source Category (Coal Preparation Plants and Processing Plants)**	54.12	14.61	3.69	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	**221.81**	**80.08**	**44.79**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Title V Major Source Thresholds	--	100	100	100	100	100	100	25
Total PTE of Entire Source Including Source-Wide Fugitives*	**13,347.48**	**4,767.42**	**420.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
MSOP Thresholds	25	25	25	25	25	25	< 100	< 25
PSD Major Source Thresholds	250	250	250	250	250	250	250	--

[1]Under the Part 70 Permit program (40 CFR 70), PM_{10} and $PM_{2.5}$, not particulate matter (PM), are each considered as a "regulated air pollutant."

[2]$PM_{2.5}$ listed is direct $PM_{2.5}$.

*Fugitive HAP emissions are always included in the source-wide emissions.

**The source includes a coal preparation plant that supports the coal mine. This type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B). However, there is an applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980 (40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants and Processing Plants); therefore, fugitive emissions from the coal preparation plant are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

(a) This existing Title V minor stationary source will continue to be minor under 326 IAC 2-7 because the uncontrolled/unlimited potential to emit regulated air pollutants and HAPs from the entire source will continue to be less than the Title V major source threshold levels. Therefore, the source is subject to the provisions of 326 IAC 2-6.1 (MSOP) and is an area source under Section 112 of the Clean Air Act (CAA).

(b) This existing minor PSD stationary source will continue to be minor under 326 IAC 2-2 because the potential to emit of all PSD regulated pollutants from the entire source will continue to be less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

Due to the administrative amendment, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) The limestone processing operation is subject to the New Source Performance Standards for Nonmetallic Mineral Processing Plants, 40 CFR 60, Subpart OOO and 326 IAC 12, because it is a *nonmetallic mineral processing plant*, as defined in 40 CFR 60.671.

The limestone processing operation is subject to the following portions of Subpart OOO.

(1) 40 CFR 60.670(a)(1), (d), (e), and (f)
(2) 40 CFR 60.671
(3) 40 CFR 60.672
(4) 40 CFR 60.673
(5) 40 CFR 60.674(b)
(6) 40 CFR 60.675
(7) 40 CFR 60.676(a), (b)(1), (f), (g), (h), (i), (j), and (k)
(8) Table 1 to Subpart OOO
(9) Table 3 to Subpart OOO

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the limestone processing operation except as otherwise specified in 40 CFR 60, Subpart OOO.

(b) The requirements of the New Source Performance Standard for Metallic Mineral Processing Plants, 40 CFR 60, Subpart LL and 326 IAC 12, are not included in the permit for the limestone processing operation, because it does have any affected facilities used in a *metallic mineral processing plant*, as defined in 40 CFR 60.380.

(c) The requirements of the New Source Performance Standard for Phosphate Rock Plants, 40 CFR 60, Subpart NN and 326 IAC 12, are not included in the permit for the limestone processing operation, because it does have any affected facilities used in a *phosphate rock plant,* as defined in 40 CFR 60.401.

(d) There are no other New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included for this administrative amendment.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

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

Compliance Assurance Monitoring (CAM):

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 - Entire Source

Due to this administrative amendment, state rule applicability has been reviewed as follows:

326 IAC 2-6.1 (MSOP)
MSOP applicability is discussed under the PTE of the Entire Source After Issuance of the MSOP Administrative Amendment section of this document.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The new emission unit(s) will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

(1) 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.

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

326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source was constructed after December 13, 1985, and has potential fugitive particulate emissions of twenty-five (25) tons per year or more. Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the Fugitive Dust Control Plan that is included as Attachment A to the permit.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-1(a), this source (located in Sullivan County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Sullivan County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

326 IAC 6.8 (Lake County: Fugitive Particulate Matter)
Pursuant to 326 IAC 6.8-10-1, this source (located in Sullivan County) is not subject to the requirements of 326 IAC 6.8-10 because it is not located in Lake County.

State Rule Applicability – Individual Facilities

Due to the administrative amendment, state rule applicability has been reviewed as follows:

Limestone Processing

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(a), the requirements of 326 IAC 6-3-2 are applicable to the limestone processing operation facilities, since these are manufacturing processes not exempted from this rule under 326 IAC 6-3-1(b) and are not subject to a particulate matter limitation that is as stringent as or more stringent than the particulate limitation established in this rule as specified in 326 IAC 6-3-1(c).

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the limestone processing operation facilities shall not exceed the process weight rate limits in the table below:

Summary of Process Weight Rate Limits			
Process / Emission Unit	**Unit ID**	**P (ton/hr)**	**E (lb/hr)**
Hopper	44a	350	64.76
Crusher	44b	350	64.76
Product Conveyor	44c	350	64.76
Side Conveyor	44d	350	64.76
Screen	45a	350	64.76
Underbelly Conveyor (Finesize)	45b	350	64.76
Underbelly Conveyor (Finesize)	45c	350	64.76
Side Conveyor (Midsize)	45d	350	64.76
Side Conveyor (Topsize)	45e	350	64.76
Crusher	46a	350	64.76
Product Conveyor	46b	350	64.76
Screen	47a	350	64.76
Underbelly Conveyor (Finesize)	47b	350	64.76
Underbelly Conveyor (Finesize)	47c	350	64.76
Side Conveyor (Midsize)	47d	350	64.76
Side Conveyor (Oversize)	47e	350	64.76
Fixed Conveyor	48	350	64.76
Fixed Conveyor	49	350	64.76
Fixed Conveyor	50	350	64.76
Fixed Conveyor	51	350	64.76
Fixed Conveyor	52	350	64.76

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

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

Compliance Determination and Monitoring Requirements

There are no new or modified compliance requirements included with this administrative amendment.

Proposed Changes

The following changes listed below are due to the proposed administrative amendment. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

(1) IDEM, OAQ has added and removed emission units in Conditions A.2, D.3, and E.2.

(2) IDEM, OAQ has updated the 326 IAC 6-3-2 emission limits table in Condition D.3.1.

A.2 Emission Units and Pollution Control Equipment Summary

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

...

(d) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(5) One (1) screen, identified as Unit 45a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(6) One (1) finesize underbelly conveyor, identified as Unit 45b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(7) One (1) finesize underbelly conveyor, identified as Unit 45c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(8) One (1) midsize side conveyor, identified as Unit 45d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(9) One (1) topsize side conveyor, identified as Unit 45e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(10) One (1) crusher, identified as Unit 46a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(11) One (1) product conveyor, identified as Unit 46b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(12) One (1) screen, identified as Unit 47a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(13) One (1) finesize underbelly conveyor, identified as Unit 47b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(14) One (1) finesize underbelly conveyor, identified as Unit 47c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(15) One (1) midsize side conveyor, identified as Unit 47d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(16) One (1) oversize side conveyor, identified as Unit 47e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(17) Five (5) fixed conveyors, identified as Units 48, 49, 50, 51, and 52, with a maximum capacity of 350 tons per hour, each, and exhausting to the atmosphere.

~~(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(5) One (1) hopper, identified as Unit 45a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(6) One (1) screener, identified as Unit 45b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(7) One (1) collection conveyor, identified as Unit 45c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(8) One (1) finesize side conveyor, identified as Unit 45d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(9) One (1) midsize side conveyor, identified as Unit 45e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(10) One (1) oversize tail conveyor, identified as Unit 45f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(11) One (1) hopper, identified as Unit 46a, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(12) One (1) crusher, identified as Unit 46b, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(13) One (1) product conveyor, identified as Unit 46c, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(14) One (1) hopper, identified as Unit 47a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(15) One (1) main conveyor, identified as Unit 47b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(16) One (1) screen, identified as Unit 47c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(17) One (1) finesize tail conveyor, identified as Unit 47d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(18) One (1) midsize side conveyor, identified as Unit 47e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(19) One (1) oversize side conveyor, identified as Unit 47f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(20) Two (2) wheeled conveyors, identified as Units 48 and 49, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.~~

~~(21) Three (3) tracked conveyors, identified as Units 50, 51, and 52, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.~~

(~~22~~**18**) Limestone storage piles

(~~23~~**19**) Unpaved roads

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

...

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(~~a~~**d**) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(5) One (1) screen, identified as Unit 45a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(6) One (1) finesize underbelly conveyor, identified as Unit 45b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(7) One (1) finesize underbelly conveyor, identified as Unit 45c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(8) One (1) midsize side conveyor, identified as Unit 45d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(9) One (1) topsize side conveyor, identified as Unit 45e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(10) One (1) crusher, identified as Unit 46a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(11) One (1) product conveyor, identified as Unit 46b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(12) One (1) screen, identified as Unit 47a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(13) One (1) finesize underbelly conveyor, identified as Unit 47b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(14) One (1) finesize underbelly conveyor, identified as Unit 47c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(15) One (1) midsize side conveyor, identified as Unit 47d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(16) One (1) oversize side conveyor, identified as Unit 47e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(17) Five (5) fixed conveyors, identified as Units 48, 49, 50, 51, and 52, with a maximum capacity of 350 tons per hour, each, and exhausting to the atmosphere.

~~(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(5) One (1) hopper, identified as Unit 45a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(6) One (1) screener, identified as Unit 45b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(7) One (1) collection conveyor, identified as Unit 45c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(8) One (1) finesize side conveyor, identified as Unit 45d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(9) One (1) midsize side conveyor, identified as Unit 45e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(10) One (1) oversize tail conveyor, identified as Unit 45f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(11) One (1) hopper, identified as Unit 46a, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(12) One (1) crusher, identified as Unit 46b, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(13) One (1) product conveyor, identified as Unit 46c, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(14) One (1) hopper, identified as Unit 47a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(15) One (1) main conveyor, identified as Unit 47b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(16) One (1) screen, identified as Unit 47c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(17) One (1) finesize tail conveyor, identified as Unit 47d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(18) One (1) midsize side conveyor, identified as Unit 47e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(19) One (1) oversize side conveyor, identified as Unit 47f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(20) Two (2) wheeled conveyors, identified as Units 48 and 49, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.~~

~~(21) Three (3) tracked conveyors, identified as Units 50, 51, and 52, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.~~

(~~22~~**18**) Limestone storage piles

(~~23~~**19**) Unpaved roads

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

(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.3.1 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)
44a	**Hopper**	**350**	**64.76**
44b	**Crusher**	**350**	**64.76**
44c	**Product Conveyor**	**350**	**64.76**
44d	**Side Conveyor**	**350**	**64.76**

Unit ID	Description	Process Weight Rate (tons per hour)	326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)
45a	**Screen**	**350**	**64.76**
45b	**Finesize Underbelly Conveyor**	**350**	**64.76**
45c	**Finesize Underbelly Conveyor**	**350**	**64.76**
45d	**Midsize Side Conveyor**	**350**	**64.76**
45e	**Topsize Side Conveyor**	**350**	**64.76**
46a	**Crusher**	**350**	**64.76**
46b	**Product Conveyor**	**350**	**64.76**
47a	**Screen**	**350**	**64.76**
47b	**Finesize Underbelly Conveyor**	**350**	**64.76**
47c	**Finesize Underbelly Conveyor**	**350**	**64.76**
47d	**Midsize Side Conveyor**	**350**	**64.76**
47e	**Oversize Side Conveyor**	**350**	**64.76**
48	**Fixed Conveyor**	**350**	**64.76**
49	**Fixed Conveyor**	**350**	**64.76**
50	**Fixed Conveyor**	**350**	**64.76**
51	**Fixed Conveyor**	**350**	**64.76**
52	**Fixed Conveyor**	**350**	**64.76**

~~Unit ID~~	~~Description~~	~~Process Weight Rate (tons per hour)~~	~~326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour)~~
~~44a~~	~~Hopper~~	~~400~~	~~66.31~~
~~44b~~	~~Crusher~~	~~400~~	~~66.31~~
~~44c~~	~~Product Conveyor~~	~~400~~	~~66.31~~
~~44d~~	~~Side Conveyor~~	~~400~~	~~66.31~~
~~45a~~	~~Hopper~~	~~661~~	~~72.35~~
~~45b~~	~~Screen~~	~~661~~	~~72.35~~
~~45c~~	~~Collection Conveyor~~	~~661~~	~~72.35~~
~~45d~~	~~Side Conveyor (finesize)~~	~~661~~	~~72.35~~
~~45e~~	~~Side Conveyor (midsize)~~	~~661~~	~~72.35~~
~~45f~~	~~Tail Conveyor (oversize)~~	~~661~~	~~72.35~~
~~46a~~	~~Hopper~~	~~352~~	~~64.83~~
~~46b~~	~~Crusher~~	~~352~~	~~64.83~~
~~46c~~	~~Product Conveyor~~	~~352~~	~~64.83~~
~~47a~~	~~Hopper~~	~~661~~	~~72.35~~
~~47b~~	~~Main Conveyor~~	~~661~~	~~72.35~~
~~47c~~	~~Screen~~	~~661~~	~~72.35~~
~~47d~~	~~Tail Conveyor (finesize)~~	~~661~~	~~72.35~~
~~47e~~	~~Side Conveyor (midsize)~~	~~661~~	~~72.35~~
~~47f~~	~~Side Conveyor (oversize)~~	~~661~~	~~72.35~~
~~48~~	~~Wheeled Conveyor #1~~	~~400~~	~~66.31~~
~~49~~	~~Wheeled Conveyor #2~~	~~400~~	~~66.31~~
~~50~~	~~Tracked Conveyor #1~~	~~400~~	~~66.31~~
~~51~~	~~Tracked Conveyor #2~~	~~400~~	~~66.31~~
~~52~~	~~Tracked Conveyor #3~~	~~400~~	~~66.31~~

...

SECTION E.2 NSPS

Emissions Unit Description:

(~~a~~**d**) Limestone processing operation, approved in 2024 for construction, including the following equipment and activities:

(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(5) One (1) screen, identified as Unit 45a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(6) One (1) finesize underbelly conveyor, identified as Unit 45b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(7) One (1) finesize underbelly conveyor, identified as Unit 45c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(8) One (1) midsize side conveyor, identified as Unit 45d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(9) One (1) topsize side conveyor, identified as Unit 45e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(10) One (1) crusher, identified as Unit 46a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(11) One (1) product conveyor, identified as Unit 46b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(12) One (1) screen, identified as Unit 47a, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(13) One (1) finesize underbelly conveyor, identified as Unit 47b, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(14) One (1) finesize underbelly conveyor, identified as Unit 47c, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(15) One (1) midsize side conveyor, identified as Unit 47d, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(16) One (1) oversize side conveyor, identified as Unit 47e, with a maximum capacity of 350 tons per hour, and exhausting to the atmosphere.

(17) Five (5) fixed conveyors, identified as Units 48, 49, 50, 51, and 52, with a maximum capacity of 350 tons per hour, each, and exhausting to the atmosphere.

~~(1) One (1) hopper, identified as Unit 44a, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(2) One (1) crusher, identified as Unit 44b, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(3) One (1) product conveyor, identified as Unit 44c, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(4) One (1) side conveyor, identified as Unit 44d, with a maximum capacity of 400 tons per hour, and exhausting to the atmosphere.~~

~~(5) One (1) hopper, identified as Unit 45a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(6) One (1) screener, identified as Unit 45b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(7) One (1) collection conveyor, identified as Unit 45c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(8) One (1) finesize side conveyor, identified as Unit 45d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(9) One (1) midsize side conveyor, identified as Unit 45e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(10) One (1) oversize tail conveyor, identified as Unit 45f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(11) One (1) hopper, identified as Unit 46a, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(12) One (1) crusher, identified as Unit 46b, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(13) One (1) product conveyor, identified as Unit 46c, with a maximum capacity of 352 tons per hour, and exhausting to the atmosphere.~~

~~(14) One (1) hopper, identified as Unit 47a, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(15) One (1) main conveyor, identified as Unit 47b, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(16) One (1) screen, identified as Unit 47c, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(17) One (1) finesize tail conveyor, identified as Unit 47d, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(18) One (1) midsize side conveyor, identified as Unit 47e, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(19) One (1) oversize side conveyor, identified as Unit 47f, with a maximum capacity of 661 tons per hour, and exhausting to the atmosphere.~~

~~(20) Two (2) wheeled conveyors, identified as Units 48 and 49, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.~~

~~(21) Three (3) tracked conveyors, identified as Units 50, 51, and 52, with a maximum capacity of 400 tons per hour, each, and exhausting to the atmosphere.~~

(~~22~~**18**) Limestone storage piles

(~~2319~~) Unpaved roads

Under 40 CFR 60, Subpart OOO, these are considered affected facilities.

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

...

Additional Changes

IDEM, OAQ made additional revisions to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

(1) IDEM, OAQ has updated the general source phone number.

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) ~~434-8500~~**922-1048**
SIC Code:	1221 (Bituminous Coal and Lignite Surface Mining) 1422 (Crushed and Broken Limestone)
County Location:	Sullivan
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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 June 17, 2024.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Andrew Belt, 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) 232-3217 or (800) 451-6027, and ask for Andrew Belt or (317) 232-3217.

(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 Air Permits page on the Internet at: https://www.in.gov/idem/airpermit/public-participation/; and the Citizens' Guide to IDEM on the Internet at: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

Appendix A: Emission Calculations
PTE Summary

Company Name: Peabody Midwest Mining LLC - Bear Run Mine
Source Address: 7255 East CR 600 South, Carlisle, IN 47838
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

Uncontrolled Potential to Emit (tons/yr)								
Emissions Unit	**PM**	**PM10**	**PM2.5***	**SO_2**	**NOx**	**VOC**	**CO**	**Total HAPs****
Coal Preparation/Processing Plant Material Handling	65.90	28.25	3.89	-	-	-	-	-
Limestone Processing Crushing, Screening, and Transfer Points	101.79	37.22	37.22	-	-	-	-	-
Total PTE of Entire Source Excluding Fugitives	**167.69**	**65.46**	**41.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Fugitive Emissions [(1)]								
Coal Preparation/Processing Plant Material Storage Piles	7.07	2.48	2.48	-	-	-	-	-
Coal Preparation/Processing Plant Unpaved Roads	47.05	12.14	1.21	-	-	-	-	-
Total Fugitives from NSPS Source Category	**54.12**	**14.61**	**3.69**					
Total PTE of Entire Source	**221.81**	**80.08**	**44.79**	**0.00**	**0.00**	**0.00**	**0.00**	**-- ****
Additional Fugitive Emissions***								
Coal Mining (Not Within Coal Plant)	*4,949.03*	*2,573.49*	*148.47*	-	-	-	-	-
Coal Mine Storage Piles (Not Within Coal Plant)	*46.94*	*16.43*	*16.43*	-	-	-	-	-
Coal Mine Unpaved Roads (Not Within Coal Plant)	*7,040.32*	*1,816.21*	*181.62*	-	-	-	-	-
Coal Mine Blasting	-	-	-	-	-	-	-	-
Limestone Processing Storage Piles	*2.03*	*0.71*	*0.71*	-	-	-	-	-
Limestone Unpaved Roads	*1,087.34*	*280.50*	*28.05*	-	-	-	-	-
Total Including Source-Wide Fugitives	**13,347.48**	**4,767.42**	**420.08**	**0.00**	**0.00**	**0.00**	**0.00**	**-**

Source-Wide Total HAPs: **-**

** PM2.5 listed is direct PM2.5*

***Fugitive HAP emissions are always included in the source-wide 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. Coal mining blasting emissions are not calculated at this time for this reason.*

[(1)] 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 Title V Permit applicability. For a detailed explanation, see the TSD section entitled "Fugitive Emissions". Since the limestone 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, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions from the limestone operation are not counted toward the determination of PSD and Title V Permit applicability.

Appendix A: Emissions Calculations
Modification Summary

Company Name: Peabody Midwest Mining LLC - Bear Run Mine
Source Address: 7255 East CR 600 South, Carlisle, IN 47838
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

Process Description	Uncontrolled Potential to Emit (PTE)								
	Criteria Pollutants							Hazardous Air Pollutants	
	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Total HAPs (tons/yr)
Limestone Crushing Circuit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Limestone Unpaved Roads	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total:	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Process Description	Uncontrolled Potential to Emit (PTE)								
	Criteria Pollutants							Hazardous Air Pollutants	
	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Total HAPs (tons/yr)
Limestone Crushing Circuit (Before Modification)	114.64	42.05	42.05	0.00	0.00	0.00	0.00	0.00	0.00
Limestone Crushing Circuit (After Modification)	101.79	37.22	37.22	0.00	0.00	0.00	0.00	0.00	0.00
Net Potential Emission Increase:	**-12.85**	**-4.83**	**-4.83**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Process Description	Uncontrolled Potential to Emit (PTE)								
	Criteria Pollutants							Hazardous Air Pollutants	
	PM (tons/yr)	PM10 (tons/yr)	PM2.5 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Total HAPs (tons/yr)
Limestone Unpaved Roads (Before Modification)	1,242.68	320.58	32.06	0.00	0.00	0.00	0.00	0.00	0.00
Limestone Unpaved Roads (After Modification)	1,087.34	280.50	28.05	0.00	0.00	0.00	0.00	0.00	0.00
Net Potential Emission Increase:	**-155.33**	**-40.07**	**-4.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate matter (< 2.5 um)

PTE = Potential to Emit
NA = Not Applicable

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

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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

														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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	1,600	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	1,600	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	1,500	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	1,500	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	4,000	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	4,000	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	4,000	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	4,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	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	2,000	0.917	yes	86.904
43	Dry crush coal stockpile	stockpile*														
Roadways																
56	Preparation plant and coal yard roads	roads*														
		Totals		**65.90**	**28.25**	**3.89**				**9.73**	**4.13**	**0.58**				

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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

Process/ Vent ID	Description	Type of Emission Point	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*		
Roadways				
56	Preparation plant and coal yard roads	roads*		
				30.58

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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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 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	1.50	1.964	0.688
Process Circuit No. 1 raw coal pile	14	6.2	7.18	1.50	1.964	0.688
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	1.50	0.697	0.244
Process Circuit No. 3 clean coal pile****	26	2.2	2.55	1.50	0.697	0.244
Dry Crush Circuit direct ship coal pile	43	6.2	7.18	0.40	0.524	0.183
Process Circuit industrial steam coal pile****	31	2.2	2.55	0.50	0.232	0.081
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
				Totals	**7.07**	**2.48**

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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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 Circuit = 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)

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)
Front-end Loader Full (Raw Coal Handling)	Front-end loader (3 CY)	105.0	24.0	129.0	145,833	18,812,500	150	0.028	4143.0
Front-end Loader Empty (Raw Coal Handling)	Front-end loader (3 CY)	105.0	0	105.0	145,833	15,312,500	150	0.028	4143.0
Front-end Loader Full (Dry Crush Circuit)	Front-end loader (3 CY)	105.0	24.0	129.0	19,984	2,577,984	256	0.048	968.9
Front-end Loader Empty (Dry Crush Circuit)	Front-end loader (3 CY)	105.0	0	105.0	19,984	2,098,359	256	0.048	968.9
	Total				**331,635**	**38,801,344**			**1.0E+04**

Average Vehicle Weight Per Trip = 117.0 tons/trip
Average Miles Per Trip = 0.031 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 =	117.0	117.0	117.0	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 =	14.00	3.61	0.36	lb/mile
Mitigated Emission Factor, Eext =	9.20	2.37	0.24	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)
Front-end Loader Full (Raw Coal Handling)	Front-end loader (3 CY)	29.00	7.48	0.75	19.07	4.92	0.49	9.53	2.46	0.25
Front-end Loader Empty (Raw Coal Handling)	Front-end loader (3 CY)	29.00	7.48	0.75	19.07	4.92	0.49	9.53	2.46	0.25
Front-end Loader Full (Dry Crush/Dry Stoker Circuits)	Front-end loader (3 CY)	6.78	1.75	0.17	4.46	1.15	0.12	2.23	0.58	0.06
Front-end Loader Empty (Dry Crush/Dry Stoker Circuits)	Front-end loader (3 CY)	6.78	1.75	0.17	4.46	1.15	0.12	2.23	0.58	0.06
	Totals	**71.55**	**18.46**	**1.85**	**47.05**	**12.14**	**1.21**	**23.52**	**6.07**	**0.61**

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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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	1,707.86	888.09	51.24
Loading Overburden (D/L)	142,863,320	tons/yr	0.037 lb/ton	0.52	0.03	2,642.97	1,374.35	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	**4,949.03**	**2,573.49**	**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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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	12.10	15.847	5.546
Process Circuit run of mine coal pile	6.2	7.18	4.40	5.762	2.017
Dry Crush Circuit run of mine coal pile	6.2	7.18	1.20	1.572	0.550
			Totals	**46.94**	**16.43**

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
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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).

	North Pit and South Pit Combined	Anticipated Breakdown North Pit	Anticipated Breakdown 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
Maximum Coal Shipping Capacity by Truck =	700,000	NA	NA	(5% of coal will be shipped by truck; 95% of coal will be shipped by rail)

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	14,800	2.803	140565.1
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	107.5	0.0	107.5	5.0E+04	5.4E+06	14,800	2.803	140565.1
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	107.5	0.0	107.5	1.2E+04	1.3E+06	3,776	0.715	8607.4
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	107.5	167.5	275.0	1.2E+04	3.3E+06	17,521	3.318	39939.3
	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	13,735	2.601	17876.9
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	107.5	0.0	107.5	6.9E+03	7.4E+05	13,735	2.601	17876.9
	Overburden Truck Leave Full	Dump truck (200 ton load)	150.0	240.0	390.0	2.3E+05	9.0E+07	2,000	0.379	87421.4
	Overburden Truck Enter Empty	Dump truck (200 ton load)	150.0	0.0	150.0	2.3E+05	3.5E+07	2,000	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	3,000	0.568	2123.2
	Topsoil and Subsoil Truck Enter Empty	Dump truck (200 ton load)	150.0	0.0	150.0	3.7E+03	5.6E+05	3,000	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	25,772	4.881	163184.5
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	107.5	0.0	107.5	3.3E+04	3.6E+06	25,772	4.881	163184.5
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	107.5	0.0	107.5	8.0E+03	8.6E+05	3,776	0.715	5738.3
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	107.5	167.5	275.0	8.0E+03	2.2E+06	26,651	5.048	40500.8
	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	28,827	5.460	25013.4
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	107.5	0.0	107.5	4.6E+03	4.9E+05	28,827	5.460	25013.4
	Overburden Truck Leave Full	Dump truck (240 ton load)	162.0	240.0	402.0	1.5E+05	6.2E+07	2,000	0.379	58280.9
	Overburden Truck Enter Empty	Dump truck (240 ton load)	162.0	0.0	162.0	1.5E+05	2.5E+07	2,000	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	3,000	0.568	1415.5
	Topsoil and Subsoil Truck Enter Empty	Dump truck (240 ton load)	162.0	0.0	162.0	2.5E+03	4.0E+05	3,000	0.568	1415.5
Coal Shipping	Coal Transport Truck Leave Full	Freight Truck (6 axles)	15.0	40.0	55.0	17,500	962,500	834	0.158	2,764
	Coal Transport Truck Enter Empty	Freight Truck (6 axles)	15.0	0	15.0	17,500	262,500	272	0.052	902
		Total				**1.0E+06**	**2.6E+08**			**1.1E+06**

Average Vehicle Weight Per Trip =	248.4	tons/trip
Average Miles Per Trip =	1.041	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 =	248.4	248.4	248.4	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 =	19.64	5.07	0.51	lb/mile
Mitigated Emission Factor, Eext =	12.92	3.33	0.33	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)	1380.51	356.13	35.61	907.73	234.17	23.42	453.87	117.09	11.71
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	1380.51	356.13	35.61	907.73	234.17	23.42	453.87	117.09	11.71
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	84.53	21.81	2.18	55.58	14.34	1.43	27.79	7.17	0.72
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	392.25	101.19	10.12	257.92	66.54	6.65	128.96	33.27	3.33
	Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	175.57	45.29	4.53	115.44	29.78	2.98	57.72	14.89	1.49
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	175.57	45.29	4.53	115.44	29.78	2.98	57.72	14.89	1.49
	Overburden Truck Leave Full	Dump truck (200 ton load)	858.58	221.49	22.15	564.55	145.64	14.56	282.27	72.82	7.28
	Overburden Truck Enter Empty	Dump truck (200 ton load)	858.58	221.49	22.15	564.55	145.64	14.56	282.27	72.82	7.28
	Topsoil and Subsoil Truck Leave Full	Dump truck (200 ton load)	20.85	5.38	0.54	13.71	3.54	0.35	6.86	1.77	0.18
	Topsoil and Subsoil Truck Enter Empty	Dump truck (200 ton load)	20.85	5.38	0.54	13.71	3.54	0.35	6.86	1.77	0.18
South Pit	Coal Mine Truck Leave Full to Plant	Dump truck (200 ton load)	1602.66	413.44	41.34	1053.80	271.85	27.19	526.90	135.93	13.59
	Coal Mine Truck Enter Empty from Plant	Dump truck (200 ton load)	1602.66	413.44	41.34	1053.80	271.85	27.19	526.90	135.93	13.59
	Refuse Transport Truck Leave Empty to Plant	Dump truck (200 ton load)	56.36	14.54	1.45	37.06	9.56	0.96	18.53	4.78	0.48
	Refuse Transport Truck Enter Full from Plant	Dump truck (200 ton load)	397.77	102.61	10.26	261.54	67.47	6.75	130.77	33.74	3.37
	Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	245.66	63.37	6.34	161.53	41.67	4.17	80.77	20.84	2.08
	Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits	Dump truck (200 ton load)	245.66	63.37	6.34	161.53	41.67	4.17	80.77	20.84	2.08
	Overburden Truck Leave Full	Dump truck (240 ton load)	572.39	147.66	14.77	376.36	97.09	9.71	188.18	48.55	4.85
	Overburden Truck Enter Empty	Dump truck (240 ton load)	572.39	147.66	14.77	376.36	97.09	9.71	188.18	48.55	4.85
	Topsoil and Subsoil Truck Leave Full	Dump truck (240 ton load)	13.90	3.59	0.36	9.14	2.36	0.24	4.57	1.18	0.12
	Topsoil and Subsoil Truck Enter Empty	Dump truck (240 ton load)	13.90	3.59	0.36	9.14	2.36	0.24	4.57	1.18	0.12
Coal Shipping	Coal Transport Truck Leave Full	Freight Truck (6 axles)	27.15	7.00	0.70	17.85	4.60	0.46	8.93	2.30	0.23
	Coal Transport Truck Enter Empty	Freight Truck (6 axles)	8.85	2.28	0.23	5.82	1.50	0.15	2.91	0.75	0.08
		Totals	**10,707.16**	**2,762.15**	**276.21**	**7,040.32**	**1,816.21**	**181.62**	**3,520.16**	**908.10**	**90.81**

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
Limestone Processing Crushing, Screening, and Transfer Points

Company Name: Peabody Midwest Mining LLC - Bear Run Mine
Source Address: 7255 East CR 600 South, Carlisle, IN 47838
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

	Unit	Unit Description	Throughput (tons)	Hours Operated	Rate (ton/hr)	Rate (lbs/hr)	Uncontrolled PM			Uncontrolled PM10/PM2.5		
							PM Emission Factor* (lb/ton)	(tons/yr)	(lb/hr)	PM10/PM2.5 Emission Factor* (lb/ton)	(tons/yr)	(lb/hr)
Liberty 3055B Jaw Crusher	44a	Hopper	3,066,000	8,760	350.0	700,000	0.003	4.59900	1.05000	0.0011	1.68630	0.38500
	44b	Crusher	3,066,000	8,760	350.0	700,000	0.0054	8.27820	1.89000	0.0024	3.67920	0.84000
	44c	Product Conveyor	3,066,000	8,760	350.0	700,000	0.003	4.59900	1.05000	0.0011	1.68630	0.38500
	44d	Side Conveyor	306,600	8,760	350.0	700,000	0.003	0.45990	0.10500	0.0011	0.16863	0.03850
Guardian 6203-TH32 Screen	45a	Screen	3,066,000	8,760	350.0	700,000	0.025	38.32500	8.75000	0.0087	13.33710	3.04500
	45b	Underbelly Conveyor (Finesize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
	45c	Underbelly Conveyor (Finesize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
	45d	Side Conveyor (Midsize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
	45e	Side Conveyor (Topsize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
Patriot P400 Cone Crusher	46a	Crusher	1,533,000	8,760	350.0	700,000	0.0054	4.13910	0.94500	0.0024	1.83960	0.42000
	46b	Product Conveyor	1,533,000	8,760	350.0	700,000	0.003	2.29950	0.52500	0.0011	0.84315	0.19250
Guardian 6203-TH32 Screen	47a	Screen	1,533,000	8,760	350.0	700,000	0.025	19.16250	4.37500	0.0087	6.66855	1.52250
	47b	Underbelly Conveyor (Finesize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
	47c	Underbelly Conveyor (Finesize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
	47d	Side Conveyor (Midsize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
	47e	Side Conveyor (Oversize)	511,000	8,760	350.0	700,000	0.003	0.76650	0.17500	0.0011	0.28105	0.06417
	48	Fixed Conveyor	3,066,000	8,760	350.0	700,000	0.003	4.59900	1.05000	0.0011	1.68630	0.38500
	49	Fixed Conveyor	1,533,000	8,760	350.0	700,000	0.003	2.29950	0.52500	0.0011	0.84315	0.19250
	50	Fixed Conveyor	1,533,000	8,760	350.0	700,000	0.003	2.29950	0.52500	0.0011	0.84315	0.19250
	51	Fixed Conveyor	1,533,000	8,760	350.0	700,000	0.003	2.29950	0.52500	0.0011	0.84315	0.19250
	52	Fixed Conveyor	1,533,000	8,760	350.0	700,000	0.003	2.29950	0.52500	0.0011	0.84315	0.19250
		Total						**101.79**			**37.22**	

* AP-42, 11.19.2 Table 11.19.2-2. No data for uncontrolled PM2.5 emission factors, so PM2.5 was conservatively estimated as PM10.

Attachment A: Emissions Calculations
Limestone Processing Material Storage Piles (Fugitive)

Company Name: Peabody Midwest Mining LLC - Bear Run Mine
Source Address: 7255 East CR 600 South, Carlisle, IN 47838
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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)
Raw Rock	53a	1.0	1.16	2.40	0.507	0.177
Lime	53b	3.9	4.51	0.50	0.412	0.144
2s	53c	1.6	1.85	0.50	0.169	0.059
4s	53g	1.6	1.85	0.20	0.068	0.024
8s	53d	1.6	1.85	1.10	0.372	0.130
53s	53e	1.6	1.85	1.10	0.372	0.130
73s	53f	1.6	1.85	0.40	0.135	0.047
				Totals	**2.03**	**0.71**

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)

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
Limestone Processing Unpaved Roads (Fugitive)

Company Name: Peabody Midwest Mining LLC - Bear Run Mine
Source Address: 7255 East CR 600 South, Carlisle, IN 47838
Administrative Amendment No.: 153-47966-00011
Permit Reviewer: Andrew Belt

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 Limestone Receiving Capacity to Plant from North =	1,533,000	tons/yr	
Maximum Limestone Receiving Capacity to Plant from South =	1,533,000	tons/yr	
Maximum Material Handling Capacity by Front-end Loader =	6,132,000	tons/yr	(load to crusher and load to freight trucks)
Maximum Limestone Shipping Capacity by Truck =	3,066,000	tons/yr	

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)
Limestone Truck to Plant Enter Full from North (Mine Roads)	Dump truck (240 ton load)	162.0	240.0	402.0	6,388	2,567,775	14,712	2.786	17,798
Limestone Truck Leave Plant Empty to North (Mine Roads)	Dump truck (240 ton load)	162.0	0.0	162.0	6,388	1,034,775	14,712	2.786	17,798
Limestone Truck to Plant Enter Full from South (Mine Roads)	Dump truck (240 ton load)	162.0	240.0	402.0	6,388	2,567,775	29,804	5.645	36,056
Limestone Truck Leave Plant Empty to South (Mine Roads)	Dump truck (240 ton load)	162.0	0.0	162.0	6,388	1,034,775	29,804	5.645	36,056
Front-end Loader Full (Within Preparation Area)	Front-end loader (3 CY)	105.0	24.0	129.0	255,500	32,959,500	150	0.028	7,259
Front-end Loader Empty (Within Preparation Area)	Front-end loader (3 CY)	105.0	0.0	105.0	255,500	26,827,500	150	0.028	7,259
Limestone Transport Truck Leave Full (Road To Scale)	Freight Truck (3 axles)	14.0	25.0	39.0	122,640	4,782,960	2,593	0.491	60,228
Limestone Transport Truck Enter Empty (Road to Scale)	Freight Truck (3 axles)	14.0	0.0	14.0	122,640	1,716,960	2,593	0.491	60,228
	Total				**781,830**	**73,492,020**			**242,680**

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)
Average Mine Roads Vehicle Weight Per Trip (W) =	282.0	282.0	282.0	tons = average vehicle weight (provided by source)
Average Front-end Loader Vehicle Weight Per Trip (W) =	117.0	117.0	117.0	tons = average vehicle weight (provided by source)
Average Road to Scale Vehicle Weight Per Trip (W) =	26.5	26.5	26.5	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	
Mine Roads Unmitigated Emission Factor, Ef =	20.80	5.36	0.54	lb/mile
Mine Roads Mitigated Emission Factor, Eext =	13.67	3.53	0.35	lb/mile
Front-end Loader Unmitigated Emission Factor, Ef =	14.00	3.61	0.36	lb/mile
Front-end Loader Mitigated Emission Factor, Eext =	9.20	2.37	0.24	lb/mile
Road to Scale Unmitigated Emission Factor, Ef =	7.18	1.85	0.19	lb/mile
Road to Scale Mitigated Emission Factor, Eext =	4.72	1.22	0.12	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Road Segment	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 Mine Road	Dump truck (240 ton load)	370.12	95.48	9.55	243.37	62.78	6.28	121.68	31.39	3.14
South Mine Road	Dump truck (240 ton load)	749.80	193.43	19.34	493.02	127.19	12.72	246.51	63.59	6.36
Preparation Area Loader Traffic	Front-end loader (3 CY)	101.60	26.21	2.62	66.81	17.23	1.72	33.40	8.62	0.86
Road to Scale	Freight Truck (3 axles)	432.14	111.48	11.15	284.15	73.30	7.33	142.07	36.65	3.67
	Totals	**1653.67**	**426.60**	**42.66**	**1087.34**	**280.50**	**28.05**	**543.67**	**140.25**	**14.03**

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
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Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Karen Risner
Peabody Midwest Mining LLC Bear Run Mine
566 Dickeyville Rd
Lynnville, IN 47619

DATE: July 3, 2024

FROM: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
MSOP Administrative Amendment
153-47966-00011

This notice is to inform you that a final decision has been issued for the air permit application referenced above.

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. In addition, the Notice of Decision has been sent to the OAQ Permits Branch Interested Parties List and, if applicable, the Consultant/Agent and/or Responsible Official/Authorized Individual.

The final decision and supporting materials are available electronically; the original signature page is enclosed for your convenience. The final decision and supporting materials available electronically at:

IDEM's online searchable database: http://www.in.gov/apps/idem/caats/ . Choose Search Option **by Permit Number**, then enter permit 47966

and

IDEM's Virtual File Cabinet (VFC): https://www.in.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

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, or have difficulty accessing the documents online, 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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Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

July 3, 2024
Peabody Midwest Mining LLC Bear Run Mine
153-47966-00011

To: Interested Parties

This notice is to inform you that a final decision has been issued for the air permit application referenced above. This notice is for informational purposes only. You are not required to take any action.

You are receiving this notice because you asked to be on IDEM's notification list for this company and/or county; or because your property is nearby the company being permitted; or because you represent a local/regional government entity.

The enclosed Notice of Decision Letter provides additional information about the final permit decision.

The final decision and supporting materials are available electronically at:

IDEM's online searchable database: http://www.in.gov/apps/idem/caats/ . Choose Search Option by Permit Number, then enter permit 47966

and

IDEM's Virtual File Cabinet (VFC): https://www.in.gov/idem. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

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.

Please Note: *If you would like to be removed from the Air Permits mailing list, please contact Joanne Smiddie-Brush with the Air Permits Administration Section at 1-800-451-6027, ext. 3-0185 or via e-mail at JBRUSH@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
Final Interested Parties Cover Letter 10/13/2023

Mail Code 61-53

IDEM Staff	JLSCOTT 7/3/2024 Peabody Midwest Mining LLC Bear Run Mine 153-47966-00011 Final		
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**

AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING

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		Karen Risner Peabody Midwest Mining LLC Bear Run Mine 566 Dickeyville Rd Lynnville IN 47619 (Source CAATS) via UPS									
2		James Boswell Authorized Representative Peabody Midwest Mining LLC Bear Run Mine 566 Dickeyville Rd Lynnville IN 47619 *(RO CAATS)*									
3		Carlisle Town Council PO Box 277 Carlisle IN 47838 *(Local Official)*									
4		Sullivan City Council and Mayors Office 110 N Main St Sullivan IN 47882 *(Local Official)*									
5		Sullivan County Health Department 27 S Main St Sullivan IN 47882-1516 *(Health Department)*									
6		Sullivan County Commissioners 100 Courthouse Square, Ste 100 Sullivan IN 47882-1593 *(Local Official)*									
7		Mr. Richard Monday S & G Excavating 545 E Margaret Dr Terre Haute IN 47802 *(Affected Party)*									
8		Gary & Susan Holmes 168 E CR 110 N Farmersburg IN 47850-8205 *(Affected Party)*									
9		Mr. Mark Fitton Tribune-Star 2800 Poplar St, Ste 37A Terre Haute IN 47807 *(Affected Party)*									
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