



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

OCT 12 2011

REPLY TO THE ATTENTION OF:

WN-16J

**CERTIFIED MAIL 7009 1680 0000 7652 5798**  
**RETURN RECEIPT REQUESTED**

C. A. Burggraf, President  
Peabody Midwest Mining, LLC  
c/o Corporation Service Company  
Registered Agent  
251 East Ohio Street, Suite 500  
Indianapolis, Indiana 46204

Re: Request for Information Pursuant to Section 308 of the Clean Water Act, 33 U.S.C.  
§ 1318, Regarding Peabody Midwest Mining, LLC - Bear Run Mine, Indiana  
Docket No. V-W-12-308-01

Dear Mr. Burggraf:

This letter concerns discharges of pollutants into waters of the United States associated with the Bear Run Mine, operated by Peabody Midwest Mining, LLC, located in southwestern Indiana.

Section 301 of the Federal Clean Water Act ("Act"), 33 U.S.C. § 1311, prohibits the discharge of pollutants into waters of the United States except as authorized by a permit issued pursuant to Sections 402 or 404 of the Act, 33 U.S.C. §§ 1342, 1344. Each discharge of pollutants from a point source that is not authorized by such a permit constitutes a violation of Section 301(a) of the Act, 33 U.S.C. § 1311(a).

This letter and the enclosures are a request for information issued pursuant to Section 308(a) of the Act, 33 U.S.C. § 1318(a). Section 308 of the Act authorizes the Administrator of the U.S. Environmental Protection Agency to require those subject to the Act to furnish information, conduct monitoring, provide entry to the Administrator or authorized representatives, and make reports as may be necessary to carry out the objectives of the Act. Enclosure 1, which is hereby made part of this letter, details the information Peabody Midwest Mining, LLC ("Peabody" or "you") must provide to EPA. Please submit your written responses in accordance with the instructions in Section I of the Information Request, which provides response deadlines and the address where information should be submitted. Pursuant to Section I, all information must be provided in the format requested within 60 days from the date this letter is received. Please provide a signed written confirmation, via fax or email attachment (pdf), to Janet Pellegrini, National Pollutant Discharge Elimination System Programs Branch, at the address provided in Enclosure 1, within 48 hours of receipt of this Information Request, of your intention to comply with this request.

Your response to this request must be accompanied by a certificate that is signed and dated by you or the person who is authorized by you to respond to the request. The certification must state that the response is complete and contains all information and documentation available to you pursuant to the request. Enclosure 2, which is hereby made part of this letter, provides a Statement of Certification for this purpose.

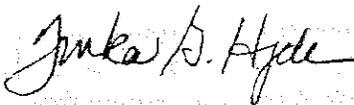
Failure to respond fully and truthfully to this information request may result in enforcement proceedings under Section 309 of the Act, 33 U.S.C. § 1319, which could result in the judicial imposition of civil or criminal penalties or the administrative imposition of civil penalties. In addition, there is potential criminal liability for the falsification of any response to the requested information.

Although the information requested must be submitted to EPA, you are entitled to assert a business confidentiality claim pursuant to the regulations set forth in 40 C.F.R. Part 2, Subpart B. If EPA determines the information you have designated meets the criteria in 40 C.F.R. § 2.208, the information will be disclosed only to the extent and by means of the procedures specified in Subpart B. Unless a confidentiality claim is asserted at the time the requested information is submitted, EPA may make the information available to the public without further notice to you (see Enclosure 3).

Enclosed is a document entitled *U.S. EPA Small Business Resources-Information Sheet* to assist you in understanding the compliance assistance resources and tools available to you (see Enclosure 4). Any decision to seek compliance assistance at this time, however, does not relieve you of your obligation to EPA nor does it create any new rights or defenses, and will not affect EPA's decision to pursue enforcement action.

If you have questions regarding this notice and information request, please contact Janet Pellegrini, of my staff, at (312) 886-4298 or have your legal counsel contact Kasey Barton, Assistant Regional Counsel, at (312) 886-7163.

Sincerely,



Tinka G. Hyde  
Director, Water Division

Enclosures

cc: P. Higginbotham, IDEM  
Peabody Midwest Mining, LLC

**ENCLOSURE 1**  
**CLEAN WATER ACT (CWA) SECTION 308 INFORMATION REQUEST**

**I. Instructions**

1. Peabody Midwest Mining, LLC must submit all information in response to this Information Request in the format requested for all items within 60 days from the date this letter is received.
2. Please provide a signed written confirmation, via fax or email attachment (pdf), to Janet Pellegrini, National Pollutant Discharge Elimination System Programs Branch, within 48 hours of receipt of this Information Request, of your intention to comply with this request.
3. Identify the person(s) responding to each Information Request.
4. All documents responsive to the Information Request should be provided in electronic format.
5. Respond to all requests using the following formats, as appropriate: MS Word Document, MS Excel Spreadsheet, MS Access Database, Geographic Information System (GIS) data, Adobe Acrobat Reader PDF format, or pictures and images in JPEG format.
6. For data that is requested and/or submitted in tables, the data shall be accumulated and organized into a clearly labeled and annotated MS Excel Spreadsheet. The spreadsheet should be formatted so that it can be printed on an 8.5" x 11" sheet of paper. The spreadsheet can be formatted to print on an 8.5" x 14" or 11" x 17" sheet of paper if doing so offers additional clarity.
7. All records and documents that you create and/or rely upon in responding to any part of this request must be maintained until EPA informs you in writing that maintenance is no longer required.
8. Provide a separate narrative response to each and every question and subpart of a question set forth in this Information Request. Precede each answer with the text and the number of the Information Request and its subpart to which the answer corresponds.
9. In answering each Information Request, identify all documents and persons consulted, examined, or referred to in the preparation of each response and provide true and accurate copies of all such documents.
10. For each document produced in response to this Information Request, indicate on the document, or in some other reasonable manner, the number of the Information Request and its subpart to which it responds.
11. Where specific information has not been memorialized in a document, but is nonetheless responsive to an Information Request, you must respond to the Information Request with a written response.
12. If information responsive to this Information Request is not in your possession, custody or control, then identify the person from whom such information may be obtained.

13. If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request or who may be able to provide additional responsive documents, identify such persons and the additional information or documents that they may have.
14. If information not known or not available to you as of the date of submission of a response to this Information Request should later become known or available to you, you must supplement your response to EPA. Moreover, should you find at any time after the submission of its response that any portion of the submitted information is false or misleading, you must notify EPA thereof as soon as possible.
15. Your response to this Information Request must be accompanied by a certificate that is signed and dated by you or the person who is authorized by you to respond to the request. The certification must state that the response is complete and contains all information and documentation available to you pursuant to the request. Enclosure 2 provides a Statement of Certification for this purpose.
16. All information submitted pursuant to this Information Request must be submitted to:

U.S. Environmental Protection Agency – Region 5  
Attention: Janet Pellegrini  
National Pollutant Discharge Elimination System Programs Branch, WN-16J  
77 West Jackson Boulevard  
Chicago, IL 60604  
pellegrini.janet@epa.gov  
312-886-4298 (phone)  
312-692-2436 (fax)

## II. Definitions

All terms used in this Information Request that are not defined below shall be defined as they are defined in Section 502 of the CWA, 33 U.S.C. § 1362, and regulations at 40 CFR § 122.2. Unless otherwise indicated, the following definitions shall apply strictly for the purposes of this Information Request:

1. “Bear Run Mine” shall include all mining or related operations associated with Bear Run Mine, located in Sullivan County, Indiana.
2. “Document” includes as any writings, drawings, graphs, charts, photographs, phone records, field records, operation logs/notes/field rounds sheets, electronic mail, facsimile, Supervisory Control and Data Acquisition (SCADA) information, and other data compilations from which information can be obtained and translated, if necessary, through detection devices into reasonably usable form. Documents should be produced as they are kept in the usual course of business.
3. “Identify” means, with respect to a natural person, to set forth the person’s name, present or

last known business address and business telephone number, present or last known home address and home telephone number, and present or last known job title, position or business.

4. "Identify" means, with respect to a document, to provide its customary business description; its date; its number, if any (invoice or purchase order number); the identity of the author, addressee and/or recipient; and substance of the subject matter.
5. "Identify" means, with respect to a corporation, partnership, business trust or other association or business entity (including a sole proprietorship), to set forth its full name, address, legal form (e.g., corporation, partnership), if any, and a brief description of its business.
6. "Mining operation" shall mean the following: any surface and/or underground mine, a coal processing and preparation plant, a coal transportation facility, and all associated operations.
7. "NPDES" or "NPDES Permit" shall mean National Pollutant Discharge Elimination System permit or any state permit issued pursuant to the NPDES program that Indiana is authorized to administer.
8. "Process water" means water (including storm water) that comes in contact with coal preparation plants and associated areas and active and post mining areas, and includes pre-existing discharges resulting from mining activities that have been abandoned prior to the time of a re-mining permit application.
9. "Point source" means any discernable, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container.
10. "Section 404 permit" shall mean a permit for dredge or fill activity issued by the Army Corps of Engineers.
11. "SMCRA" or "SMCRA Permit" shall mean any permit issued by Federal or State entities pursuant to the Surface Mining Control and Reclamation Act and shall include all issued and proposed amendments to the SMCRA permit.
12. "State" means the State of Indiana.
13. "Wetlands" shall mean those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
14. "You" and "your" shall mean Peabody Midwest Mining, LLC and/or any company, entity, or corporation that has directed work at a Peabody Midwest Mining, LLC mining operation, and any parent, affiliate, subsidiary or related entity of Peabody Midwest Mining, LLC.

### III. Information Requests

1. Identify the following for Peabody Midwest Mining, LLC: the state of incorporation, the principal place of business, and provide the name and mailing address of the registered agent for each state in which you do business. If there is a parent company, please list the name and address of the parent.

2. Identify all owners of Bear Run Mine. State the nature of the ownership interest for each owner. Identify all leases, limited liability and/or general partnership agreements, or any other ownership agreements in place for Bear Run Mine.
3. Identify all operators of Bear Run Mine during the five-year period preceding the date of receipt of this letter. For each operator, describe in detail the nature of the mining operations that entity engaged or engages in. Identify and provide all operating agreements in place for Bear Run Mine, including but not limited to, operating agreements in connection with the following:
  - A. All NPDES permits, including but not limited to Permit No. ING040239;
  - B. All SMCRA permits, including all issued and proposed amendments thereto, including but not limited to Permit Nos. S-256 and S-264;
  - C. All other mining operations owned or operated by your company associated with Bear Run Mine; and
  - D. Include the name, address and contact information for each operation.
4. Provide the following information for all the operations associated with Bear Run Mine, including, but not limited to, your operations in connection with SMCRA Permit Nos. S-256 and S-264, including all issued and proposed amendments thereto, and all NPDES permits associated with Bear Run Mine, including but not limited to, NPDES Permit No. ING040239. Provide information in chronological order, where applicable (i.e. 4F, 4G and 4H):
  - A. Provide the date that mining operations began.
  - B. Provide the primary Standard Industrial Classification (SIC) code(s).
  - C. Provide a table and/or list of permits, including SMCRA, NPDES and Section 404 permits, in effect at any time during the five-year period preceding the date of receipt of this letter, and include the permit number, date of coverage, and receiving water(s). Include the information required in No. 4F, 4G and 4H, below.
  - D. Provide a copy of all NPDES permits associated with Bear Run Mine in effect at any time during the five-year period preceding the date of receipt of this letter. Include copies of all related permit renewals, modifications or revisions, permit authorization notices and associated Notices of Intent (NOIs) or permit applications.
  - E. Provide a map which identifies the following:
    1. All process water and storm water discharge locations including latitude and longitude, where available, and, where applicable, associated outfall numbers; and
    2. All biological and water chemistry sampling locations associated with the results identified in No. 4F, 4G and 4H, below.
  - F. Provide all analytical results, including sampling results generated by any laboratory under contract to you, or by your employees, or by you, for any monitoring of process water and storm water discharges during the five-year period preceding the date of receipt of this letter, including ambient and groundwater monitoring for all

NPDES and/or SMCRA permits. Include all effluent sampling results completed by you or on your behalf, regardless of whether or not the data was submitted to any regulatory agency. Key all sampling results to their respective locations on the map required in No. 4E, and identify any permit associated with the results in the table/list required in No. 4C.

- G. Provide copies of all Discharge Monitoring Reports (DMRs) submitted to any regulatory agency during the five-year period preceding the date of receipt of this letter. Key the results to their respective locations on the map required in No. 4E, and identify any permit associated with each DMR in the table/list required in No. 4C.
- H. Provide a copy of all biological and water chemistry monitoring and/or sampling results during the five-year period preceding the date of receipt of this letter, other than the sampling results provided under No. 4F, above. Key the results to their respective locations on the map required in No. 4E, and identify any permit associated with the sampling results in the table/list required in No. 4C.
- I. Provide a narrative that identifies where the process water is generated and describes/illustrates how the water is conveyed (e.g. pipe, overland flow) and managed (e.g. pond/impoundment, discharged through outfall, overland flow, etc.). Provide a line drawing showing the water flow through the processing plant facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units and /or sedimentation ponds labeled to correspond to the more detailed descriptions in I (1). Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units/ sedimentation ponds, and outfalls.
  - (1) For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, cooling water, and storm water; (2) the average flow contributed by each operation; and (3) The treatment, if any, received by the wastewater.

**ENCLOSURE 2**

**STATEMENT OF CERTIFICATION**

I certify that the information contained in or accompanying this submission is true, accurate, and complete.

As to the identified portion(s) of this submission for which I cannot personally verify its truth and accuracy, I certify as the company official having supervisory responsibility for the person(s) who, acting under my direct instructions, made the verification, that this information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

By \_\_\_\_\_

(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

## ENCLOSURE 3

### Confidential Business Information (CBI) Assertion and Substantiation Requirements

#### Assertion Requirements

You may assert a business confidentiality claim covering all or part of the information requested in the attached letter, as provided in 40 C.F.R. § 2.203(b). To make a confidentiality claim, submit the requested information and indicate that you are making a claim of confidentiality. Any document over which you make a claim of confidentiality should be marked by placing on or attaching to the information, at the time it is submitted to EPA, a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret" or "proprietary" or "company confidential" and a date, if any, when the information should no longer be treated as confidential. Information covered by such a claim will be disclosed by the EPA only to the extent permitted and by means of the procedures set forth by Section 308 of the CWA, and 40 C.F.R. Part 2. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified. EPA will construe the failure to furnish a confidentiality claim with your response to the attached letter as a waiver of that claim, and the information may be made available to the public without further notice to you.

Please segregate personnel, medical and similar files from your responses and include that information on separate sheet(s) marked as "Personal Privacy Information," given that disclosure of such information to the general public may constitute an invasion of privacy.

#### Substantiation Requirements

All confidentiality claims are subject to EPA verification and must be made in accordance with 40 C.F.R. § 2.208 which provides in part that you satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; and that the information is not and has not been reasonably obtainable by legitimate means without your consent.

Pursuant to 40 C.F.R. Part 2, Subpart B, EPA may at any time send you a letter asking you to substantiate fully your CBI claim. You must provide EPA with a response within the number of days set forth in the EPA request letter. Failure to submit your comments within that time will be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information. EPA will ask you to specify which portions of the information you consider confidential. **You must be specific by page, paragraph, and sentence when identifying the information subject to your claim.** Any information not specifically identified as subject to a confidentiality claim may be disclosed to the requestor without further notice to you. For each item or class of information that you identify as being subject to CBI, EPA will ask you to answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question 1 above?

- A. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
- B. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
- C. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
- D. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?

Please note that effluent data provided under Section 308 of the CWA, 33 U.S.C. § 1318, is not entitled to confidential treatment under 40 C.F.R. Part 2. "Effluent data" means, with reference to any source of discharge of pollutant (as that term is defined in Section 502(6) of the CWA, 33 U.S.C. 1362 (6)):

Information necessary to determine the identity, amount, frequency, concentration, temperature, or other characteristics (to the extent related to water quality) of any pollutant which has been discharged by the source (of of any pollutant resulting from any discharge from the source), or any combination of the foregoing;

Information necessary to determine the identity, amount, frequency, concentration, temperature, or other characteristics (to the extent related to water quality) of the pollutants which, under an applicable standard or limitation, the source was authorized to discharge (including, to the extent necessary for such purpose, a description of the manner or rate of operation of the source); and

A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. § 2.302 (a)(2)(i)(A), (B) and (C).

ENCLOSURE 4



## U.S. EPA Small Business Resources Information Sheet

The United States Environmental Protection Agency provides an array of resources, including workshops, training sessions, hotlines, websites and guides, to help small businesses understand and comply with federal and state environmental laws. In addition to helping small businesses understand their environmental obligations and improve compliance, these resources will also help such businesses find cost-effective ways to comply through pollution prevention techniques and innovative technologies.

### EPA's Small Business Websites

Small Business Environmental Homepage - [www.smallbiz-enviroweb.org](http://www.smallbiz-enviroweb.org)

Small Business Gateway - [www.epa.gov/smallbusiness](http://www.epa.gov/smallbusiness)

EPA's Small Business Ombudsman - [www.epa.gov/sbo](http://www.epa.gov/sbo) or 1-800-368-5888

#### EPA's Compliance Assistance Homepage

[www.epa.gov/compliance/assistance/business.html](http://www.epa.gov/compliance/assistance/business.html)

This page is a gateway to industry and statute-specific environmental resources, from extensive web-based information to hotlines and compliance assistance specialists.

#### EPA's Compliance Assistance Centers

[www.assistancecenters.net](http://www.assistancecenters.net)

EPA's Compliance Assistance Centers provide information targeted to industries with many small businesses. They were developed in partnership with industry, universities and other federal and state agencies.

#### Agriculture

[www.epa.gov/agriculture/](http://www.epa.gov/agriculture/)

#### Automotive Recycling

[www.ecarcenter.org](http://www.ecarcenter.org)

#### Automotive Service and Repair

[www.ccar-greenlink.org](http://www.ccar-greenlink.org) or 1-888-GRN-LINK

#### Chemical Manufacturing

[www.chemalliance.org](http://www.chemalliance.org)

#### Construction

[www.cicacenter.org](http://www.cicacenter.org) or 1-734-995-4911

#### Education

[www.campuserc.org](http://www.campuserc.org)

#### Food Processing

[www.fpeac.org](http://www.fpeac.org)

#### Healthcare

[www.hercenter.org](http://www.hercenter.org)

#### Local Government

[www.lgean.org](http://www.lgean.org)

#### Metal Finishing

[www.nmfrc.org](http://www.nmfrc.org)

#### Paints and Coatings

[www.paintcenter.org](http://www.paintcenter.org)

#### Printed Wiring Board Manufacturing

[www.pwbrc.org](http://www.pwbrc.org)

#### Printing

[www.pneac.org](http://www.pneac.org)

#### Ports

[www.portcompliance.org](http://www.portcompliance.org)

#### U.S. Border Compliance and Import/Export Issues

[www.bordercenter.org](http://www.bordercenter.org)

#### Hotlines, Helplines and Clearinghouses

[www.epa.gov/epahome/hotline.htm](http://www.epa.gov/epahome/hotline.htm)

EPA sponsors many free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements. Some examples are:

#### Antimicrobial Information Hotline

[info-antimicrobial@epa.gov](mailto:info-antimicrobial@epa.gov) or  
1-703-308-6411

#### Clean Air Technology Center (CATC) Info-line

[www.epa.gov/ttn/catc](http://www.epa.gov/ttn/catc) or 1-919-541-0800

#### Emergency Planning and Community Right-To-Know Act

[www.epa.gov/superfund/resources/infocenter/epcra.htm](http://www.epa.gov/superfund/resources/infocenter/epcra.htm) or 1-800-424-9346

#### EPA Imported Vehicles and Engines Public Helpline

[www.epa.gov/otaq/imports](http://www.epa.gov/otaq/imports) or  
734-214-4100

#### National Pesticide Information Center

[www.npic.orst.edu/](http://www.npic.orst.edu/) or 1-800-858-7378

#### National Response Center Hotline -

to report oil and hazardous substance spills  
[www.nrc.uscg.mil](http://www.nrc.uscg.mil) or 1-800-424-8802

#### Pollution Prevention Information Clearinghouse (PPIC)

[www.epa.gov/opptintr/ppic](http://www.epa.gov/opptintr/ppic) or  
1-202-566-0799

#### Safe Drinking Water Hotline

[www.epa.gov/safewater/hotline/index.html](http://www.epa.gov/safewater/hotline/index.html) or 1-800-426-4791

#### Stratospheric Ozone Protection Hotline

[www.epa.gov/ozone](http://www.epa.gov/ozone) or 1-800-296-1996

## Toxic Substances Control Act (TSCA) Hotline

[tsca-hotline@epa.gov](mailto:tsca-hotline@epa.gov) or 1-202-554-1404

## Wetlands Information Helpline

[www.epa.gov/owow/wetlands/wetline.html](http://www.epa.gov/owow/wetlands/wetline.html) or 1-800-832-7828

## State and Tribal Web-Based Resources

### State Resource Locators

[www.envcap.org/statetools](http://www.envcap.org/statetools)

The Locators provide state-specific contacts, regulations and resources covering the major environmental laws.

### State Small Business Environmental Assistance Programs (SBEAPs)

[www.smallbiz-enviroweb.org](http://www.smallbiz-enviroweb.org)

State SBEAPs help small businesses and assistance providers understand environmental requirements and sustainable business practices through workshops, trainings and site visits. The website is a central point for sharing resources between EPA and states.

### EPA's Tribal Compliance Assistance Center

[www.epa.gov/tribalcompliance/index.html](http://www.epa.gov/tribalcompliance/index.html)

The Center provides material to Tribes on environmental stewardship and regulations that might apply to tribal government operations.

### EPA's Tribal Portal

[www.epa.gov/tribalportal/](http://www.epa.gov/tribalportal/)

The Portal helps users locate tribal-related information within EPA and other federal agencies.

### EPA Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations before an enforcement action has been initiated, businesses may be eligible for penalty waivers or reductions. EPA has two such policies that may apply to small businesses:

#### EPA's Small Business Compliance Policy

[www.epa.gov/compliance/incentives/smallbusiness/index.html](http://www.epa.gov/compliance/incentives/smallbusiness/index.html)

This Policy offers small businesses special incentives to come into compliance voluntarily.

#### EPA's Audit Policy

[www.epa.gov/compliance/incentives/auditing/auditpolicy.html](http://www.epa.gov/compliance/incentives/auditing/auditpolicy.html)

The Policy provides incentives to all businesses that voluntarily discover, promptly disclose and expeditiously correct their noncompliance.

### Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established a SBREFA Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. If you believe that you fall within the Small Business Administration's definition of a small business (based on your North American Industry Classification System designation, number of employees or annual receipts, as defined at 13 C.F.R. 121.201; in most cases this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247), or go to their website at [www.sba.gov/ombudsman](http://www.sba.gov/ombudsman).

Every small business that is the subject of an enforcement or compliance action is entitled to comment on the Agency's action without fear of retaliation. EPA employees are prohibited from using enforcement or any other means of retaliation against a member of the regulated community in response to comment made under SBREFA.

### Your Duty to Comply

If you receive compliance assistance or submit a comment to the SBREFA Ombudsman or Regional Fairness Board you still have the duty to comply with the law, including providing timely responses to EPA information request administrative or civil complaints, other enforcement action or communications. The assistance information and comment processes do not give you any new rights or defenses in an enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under all of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

*EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act or related provisions.*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAR 22 2012

REPLY TO THE ATTENTION OF:

WN-16J

**CERTIFIED MAIL 7009 1680 0000 7635 8750**  
**RETURN RECEIPT REQUESTED**

C. A. Burggraf, President  
Peabody Midwest Mining, LLC  
c/o Corporation Service Company  
Registered Agent  
251 East Ohio Street, Suite 500  
Indianapolis, Indiana 46204

Re: Request for Information Pursuant to Section 308 of the Clean Water Act, 33 U.S.C.  
§ 1318, Regarding Peabody Midwest Mining, LLC - Bear Run Mine, Indiana  
Docket No. V-W-12-308-09

Dear Mr. Burggraf:

This letter concerns discharges of pollutants into waters of the United States associated with the Bear Run Mine, operated by Peabody Midwest Mining, LLC, located in southwestern Indiana.

This letter and the enclosures are a request for information issued pursuant to Section 308(a) of the Clean Water Act ("CWA" or "the Act"), 33 U.S.C. § 1318(a). Section 308 of the Act authorizes the U.S. Environmental Protection Agency to require those subject to the Act to furnish information, conduct monitoring, sample effluents, and make reports as may be necessary to carry out the objectives of the Act. Enclosure 1, which is hereby made part of this letter, details the information Peabody Midwest Mining, LLC ("Peabody" or "you") must provide to EPA. Please submit your written responses in accordance with the instructions in section I of the Information Request, which provides response deadlines and the address where information should be submitted.

This request for information requires Peabody to, among other things, conduct biological, physical habitat and water quality monitoring and sampling in order to assess the impacts of discharges from the Bear Run Mine to waters of the United States, in furtherance of the objectives of the Act. EPA encourages Peabody to consult with EPA on any issues and questions regarding the development of the requested monitoring and sampling plans. Please provide a signed written confirmation of your intention to comply with this request, via fax or email attachment (pdf), to Janet Pellegrini, National Pollutant Discharge Elimination System Programs Branch, at the address provided in Enclosure 1, within five business days of receipt of this Information Request.

Your responses to this request must be accompanied by a certificate that is signed and dated by you or the person who is authorized by you to respond to the request. The certification must state that the response is complete and contains all information and documentation available to you pursuant to the request. Enclosure 2, which is hereby made part of this letter, provides a Statement of Certification for this purpose.

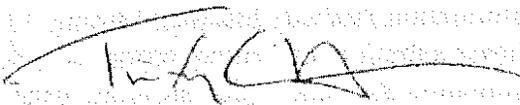
Failure to respond fully and truthfully to this information request may result in enforcement proceedings under Section 309 of the Act, 33 U.S.C. § 1319, which could result in the judicial imposition of civil or criminal penalties or the administrative imposition of civil penalties. In addition, there is potential criminal liability for the falsification of any response to the requested information.

Although the information requested must be submitted to EPA, you are entitled to assert a business confidentiality claim pursuant to the regulations set forth in 40 C.F.R. Part 2, Subpart B. If EPA determines the information you have designated meets the criteria in 40 C.F.R. § 2.208, the information will be disclosed only to the extent and by means of the procedures specified in Subpart B. Unless a confidentiality claim is asserted at the time the requested information is submitted, EPA may make the information available to the public without further notice to you (see Enclosure 3).

Enclosed is a document entitled *U.S. EPA Small Business Resources-Information Sheet* to assist you in understanding the compliance assistance resources and tools available to you (see Enclosure 4). Any decision to seek compliance assistance at this time, however, does not relieve you of your obligation to EPA nor does it create any new rights or defenses, and will not affect any EPA decision to pursue enforcement action.

If you have questions regarding this information request, please contact Janet Pellegrini, at (312) 886-4298, or have your legal counsel contact Kasey Barton, Assistant Regional Counsel, at (312) 886-7163.

Sincerely,

  
Tinka G. Hyde  
Director, Water Division

Enclosures

cc: P. Higginbotham, IDEM  
John W. Watson, Esq.

**ENCLOSURE 1**  
**CLEAN WATER ACT (CWA) SECTION 308 INFORMATION REQUEST**

**I. Instructions**

1. Please provide a signed written confirmation, via fax or email attachment (pdf), to Janet Pellegrini, National Pollutant Discharge Elimination System Programs Branch, within five business days of receipt of this Information Request, of your intention to comply with this request.
2. Peabody Midwest Mining, LLC (Peabody) must submit to EPA for review and comment draft water quality, physical habitat, and biological sampling plans consistent with the requirements of this request within 30 days from the date of receipt of this request.
3. Peabody must submit to EPA final water quality, physical habitat, and biological sampling plans within 15 days from the date of receipt of any comments received from EPA, or within 15 days from the date of receipt of notice that EPA has completed a review of the plans. The final sampling plans must address any comments received by EPA.
4. Peabody must submit to EPA interim water quality sampling results every 30 days after water quality sampling begins, until the final water quality sampling report is submitted.
5. Peabody must submit all other information required by this request to EPA no later than November 19, 2012.
6. Identify the person(s) responding to each Information Request.
7. All documents responsive to the Information Request should be provided in electronic format.
8. Respond to all requests using the following formats, as appropriate: MS Word Document, MS Excel Spreadsheet, MS Access Database, Geographic Information System (GIS) data, Adobe Acrobat Reader PDF format, or pictures and images in JPEG format. Data may be submitted on CD-ROMs or other electronic formats acceptable to EPA.
9. For data that is requested and/or submitted in tables, the data shall be accumulated and organized into a clearly labeled and annotated MS Excel Spreadsheet. The spreadsheet should be formatted so that it can be printed on an 8.5" x 11" sheet of paper. The spreadsheet can be formatted to print on an 8.5" x 14" or 11" x 17" sheet of paper if doing so offers additional clarity.
10. All records and documents that you create and/or rely upon in responding to any part of this request must be maintained for a period of at least 3 years from the date of the sample, measurement, or report, unless this time period is extended at the request of EPA in writing. Records of monitoring information shall include: the date, exact place, and time of sampling or measurements; the dates analyses were performed, the individual(s) who performed the analyses, the analytical techniques or methods used, and the results of such analyses.
11. In answering each Information Request, identify all documents and persons consulted, examined, or referred to in the preparation of each response. If any protocols are used for sampling and/or analysis in addition to those identified in section III, below, provide true and accurate copies of such documents.

12. For each document produced in response to this Information Request, indicate on the document, or in some other reasonable manner, the number of the Information Request and its subpart to which it responds.
13. If information not known or not available to you as of the date of submission of a response to this Information Request should later become known or available to you, you must supplement your response to EPA. Moreover, should you find at any time after the submission of its response that any portion of the submitted information is false or misleading, you must notify EPA thereof as soon as possible.
14. Your response to this Information Request must be accompanied by a certificate that is signed and dated by you or the person who is duly authorized by you to respond to the request. The certification must state that the response is complete and contains all information and documentation available to you pursuant to the request. Enclosure 2 provides a Statement of Certification for this purpose.
15. All information submitted pursuant to this Information Request must be submitted to:

U.S. Environmental Protection Agency – Region 5  
Attention: Janet Pellegrini  
NPDES Programs Branch, WN-16J  
77 West Jackson Boulevard  
Chicago, IL 60604  
pellegrini.janet@epa.gov  
312-886-4298 (phone)  
312-692-2436 (fax)

## II. Definitions

All terms used in this Information Request that are not defined below shall be defined as they are defined in Section 502 of the CWA, 33 U.S.C. § 1362, and regulations at 40 C.F.R. § 122.2 and 40 C.F.R. Part 434. Unless otherwise indicated, the following definitions shall apply strictly for the purposes of this Information Request:

1. “Bear Run Mine” shall include all mining and related operations associated with Bear Run Mine, located in Sullivan County, Indiana.
2. “Document” includes any writings, drawings, graphs, charts, photographs, phone records, field records, operation logs/notes/field rounds sheets, electronic mail, facsimile, Supervisory Control and Data Acquisition (SCADA) information, and other data compilations from which information can be obtained and translated, if necessary, through detection devices into reasonably usable form. Documents must be produced as they are kept in the usual course of business.
3. “Mining operation” shall mean the following: any surface and/or underground mine, a coal processing and preparation plant, a coal transportation facility, and all associated operations.
4. “NPDES” or “NPDES Permit” shall mean National Pollutant Discharge Elimination System permit or any state permit issued pursuant to the NPDES program that Indiana is authorized to administer.

5. "Process water" means water (including storm water) that comes in contact with coal preparation plants and associated areas, and active and post mining areas (including abandoned mine areas).
6. "Point source" means any discernable, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container.
7. "SMCRA" or "SMCRA Permit" shall mean any permit issued by Federal or State entities pursuant to the Surface Mining Control and Reclamation Act and shall include all issued and proposed amendments to the SMCRA permit.
8. "State" means the State of Indiana.
9. "You" and "your" shall mean Peabody Midwest Mining, LLC and/or any company, entity, or corporation that has directed work at a Peabody Midwest Mining, LLC mining operation, and any parent, affiliate, subsidiary or related entity of Peabody Midwest Mining, LLC.
10. "Busseron Creek" shall mean the Watershed Assessment Unit for Busseron Creek, with Hydrologic Unit Code 0512011115.
11. "Black Creek" shall mean the Watershed Assessment Unit for Black Creek, with Hydrologic Unit Code 0512020206.
12. "Indian Creek" shall mean the Watershed Assessment Unit for Indian Creek, with Hydrologic Unit Code 0512020208.
13. "Maria Creek" shall mean the Watershed Assessment Unit for Maria Creek, with Hydrologic Unit Code 0512011118.
14. "Coal refuse pile area" as defined in 40 C.F.R. § 434.11(p), means any coal refuse deposited on the earth and intended as permanent disposal or long-term storage (greater than 180 days) of such material, but does not include coal refuse deposited within the active mining area or coal refuse never removed from the active mining area.
15. "Coal preparation and coal preparation plant associated areas" as defined in 40 C.F.R. § 434.20, means discharges from coal preparation plants and coal preparation plant association areas, including discharges which are pumped, siphoned, or drained from the coal preparation plant water circuit and coal storage, refuse storage, and ancillary areas related to the cleaning or beneficiation of coal of any rank including, but not limited to, bituminous, lignite and anthracite. *See also* 40 C.F.R. § 434.11 (e), (f) and (g).
16. "Mine drainage areas" as defined in 40 C.F.R. § 434.11(h) means any drainage, and any water pumped or siphoned, from an active mining area or a post-mining area.
17. "Active mining area", as defined in 40 C.F.R. 434.11(b), means the area, on and beneath land, used or disturbed in activity related to the extraction, removal, or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant associated areas and post-mining areas.
18. "Reclamation areas" as defined in 40 C.F.R. § 434.11(i), means the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) work has commenced.

### III. Information Request

1. Develop and implement final water quality, physical habitat, and biological monitoring and sampling plans for the following watersheds and associated waterways: Busseron Creek, Black Creek, Indian Creek and Maria Creek. These plans shall be developed and implemented in accordance with all requirements in nos. 2 through 5, below.
2. Develop and submit to EPA for review and comment draft water quality, physical habitat, and biological monitoring and sampling plans that include the information described in parts (A) through (E), below. Each sampling plan shall be drafted in accordance with the applicable testing and sampling methods at 40 C.F.R. Part 136, as well as the Indiana Department of Environmental Management's *Survey Sections Field Procedure Manual, Revised June 2002*, Beckman T, Editor, IDEM, Office of Water Quality, Assessment Branch, Surveys Section, Indianapolis, Indiana, IDEM 032/02/055/2002. Each plan must include, but is not limited to, the following information:
  - A. Sampling locations identified on a map that includes all process and storm water discharge locations and associated outfall numbers where applicable; all mine features; location of impoundments, current site contours, and reclaimed areas;
  - B. Description of the sampling and testing methods to be used with specific reference to the use of the protocols and requirements identified in this request;
  - C. Identification of the dates when the monitoring and sampling will be conducted and the frequency of samples;
  - D. Laboratories that will be used to analyze sampling results; and
  - E. Identification of personnel to be employed for the sampling and monitoring, and a description of the qualifications of each person to perform the sampling and monitoring.
3. The water quality monitoring and sampling shall address the components listed below, in accordance with the criteria listed below:
  - A. Perform ambient water quality sampling.
    1. Sampling locations and frequency:

Water quality monitoring and sampling must be developed and implemented for areas that have permitted NPDES outfalls within Peabody's SMCRA Permit S-256 amendment nos. 1, 2, 3 and 4, at points downstream of the NPDES outfalls, but upstream from any tributaries that may dilute the samples. Sampling locations should be selected based on the following criteria:

      - a. A minimum of three sample locations where no mining activities have occurred from areas within SMCRA Permit S-256 amendment no. 5.
      - b. Sampling locations downstream from all processing plant outfalls, including NPDES outfalls 061 and 062, (this includes NPDES outfalls from sedimentation pond basins that receive coal processing plant waste and/or discharge).

- c. For each amendment area within SMCRA Permit S-256, select at least one representative sample location downstream from a NPDES outfall categorized as alkaline and undetermined, including NPDES outfall 052, for each of the following receiving streams: Buttermilk Creek, Black Creek, Middle Fork Creek, Spencer Creek, Pollard Ditch, and Maria Creek. (For example, Buttermilk Creek has a total of four NPDES outfalls categorized as alkaline: #001, #003R, #016R and #046. Downstream samples are required for one of those listed outfalls).
- d. Each sample location must be selected based on the priority system below. Each sample location must capture one of the following waste categories, listed in order of descending priority: coal refuse pile; coal preparation plant areas and associated areas (if any exist in addition to NPDES outfalls #061 and #062); controlled surface mine drainage (run-off from active mining areas); and reclamation areas. (For example, within Buttermilk Creek's alkaline outfalls, determine whether any of those outfalls serves a priority 1 area: "coal refuse pile." If so, then that outfall must be selected as a sampling location. If none of the four outfalls are in that category, then select an outfall that is serving a Priority 2 area, and so on). Complete and include the chart below in the sampling plan:

Amendment Area \_\_\_\_\_

Receiving stream /Amendment Area/Outfall Category	Priority 1. Coal refuse pile (if not present, move to select next available process discharge)	Priority 2. Coal preparation plant & associated areas (if not present, move to select next available process discharge)	Priority 3. Controlled surface mine drainage areas (if not present, move to select next available process discharge)	Priority 4. Reclamation areas (if not present, move to select next available process discharge)
Buttermilk Creek /S-256- /alkaline outfall				
Buttermilk Creek / S-256- /undetermined outfall				
Black Creek / 256- /alkaline outfall				
Black Creek / 256- /undetermined outfall				
Middle Fork Creek -- alkaline outfall				
Middle Fork Creek --				

undetermined outfall				
Spencer Creek – alkaline outfall				
Spencer Creek – undetermined outfall				
Pollard Ditch – alkaline outfall				
Pollard Ditch – undetermined outfall				
Maria Creek – alkaline outfall				
Maria Creek – undetermined outfall				

- e. For all sampling locations selected, indicate the status of mining activity, including but not limited to one of the categories specified above, on the sampling location map and on the data tables with the sampling results (e.g., active mining, post-mining, reclaimed, etc.).

2. Protocols:

- a. T. Beckman, Editor, 2002. *Surveys Section Field Procedure Manual. Revised June 2002.* IDEM, Office of Water Quality, Assessment Branch, Surveys Section, Indianapolis, Indiana. IDEM 032/02/055/2002. This document can be found at: <http://monitoringprotocols.pbworks.com/f/IDEM+SurveysSOP2002.pdf>.
- b. T. Bowren, S. Ghiasuddin, 2004. *Quality Assurance Project Plan for Indiana Surface Water Quality and Total Maximum Daily Load Program. Revision 3.* IDEM, Office of Water Quality, Assessment Branch, Quality Management System, Indianapolis, Indiana. IDEM/100/29/338/073/2004. This document can be requested through IDEM at: [http://www.in.gov/idem/files/tox\\_chem\\_qapp\\_iwq.pdf](http://www.in.gov/idem/files/tox_chem_qapp_iwq.pdf).

3. Sampling requirements:

- a. Collection method: Surface water shall be collected as either a 24 hour composite sample or a series of grab samples collected over a 24 hour period and shall be collected from the upper 12 inches of surface water at each sampling location.
- b. Sampling frequency: for each sampling location, samples should, at a minimum, be taken for four separate days and include a range of flow conditions (e.g., dry weather, low flow and high flow).

- c. Sampling parameters: samples shall be collected to test for all parameters as required for effluent sampling, as described below. Field measurements of dissolved oxygen, pH, temperature, and specific conductance will be made using water quality probe meters. Water quality probe continuous recorders will be placed at all selected sampling locations to evaluate diurnal measurements of dissolved oxygen, pH, temperature, and conductivity.
- d. At least half (minimum of 2 days) of the ambient water quality sampling must be conducted at the same time of the effluent sampling specified below.

B. Perform whole effluent toxicity (WET) testing and analysis.

1. Protocol:

For chronic toxicity testing:

- a. USEPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th edition. EPA-821-R-02-013.

2. Sampling requirements:

WET testing shall be conducted at a selection of NPDES outfalls that must include:

- a. For each of Peabody's SMCRA Permit S-256 amendment areas nos. 1, 2, 3 and 4, all processing plant outfalls (NPDES outfalls from sedimentation pond basins that receive coal processing plant waste and/or discharge); and at least one representative outfall for each of the following outfall categories: alkaline, undetermined and acidic.
- b. One WET test shall be run for each processing plant NPDES outfall and subset of outfalls selected. Chronic toxicity testing is appropriate for low dilution waters with extended or continuous discharge.
- c. The test organisms must be *Ceriodaphnia dubia*, and fathead minnows. Samples must not be filtered.

C. Perform effluent sampling and analysis.

1. Protocols:

Effluent sampling and analysis must include the following list of parameters:

- a. Cations: calcium, magnesium, sodium, and potassium.
- b. Anions: Chloride, sulfate, bicarbonate, and phosphate.

- c. Metals: Mercury, iron, zinc, selenium, manganese, aluminum, cadmium, vanadium, and chromium. Mercury analysis must use EPA sampling Method 1669 and analytical Method 1631E. Selenium analysis must use low level methods such that the quantification level is 1.0 ug/L or lower. All metal sampling and analysis must include methods for both dissolved and total metals.
- d. Additional sampling parameters: pH, TDS- total dissolved solids and specific conductance.
- e. Analytical methods shall be conducted in accordance with 40 C.F.R. Part 136 and T. Beckman, Editor, 2002. *Surveys Section Field Procedure Manual. Revised June 2002.* IDEM, Office of Water Quality, Assessment Branch, Surveys Section, Indianapolis, Indiana. IDEM 032/02/055/2002.

2. Sampling requirements:

- a. Sampling shall be conducted during discharge and be performed utilizing the 24 hour composite sampling method. The 24 hour composite sampling can be conducted through either of these methods: automated samplers or as a specified number of aliquots (grabs) collected over a 24 hour period from which one analytical result is reported. A "no flow" situation is not considered to be a sample of the discharge.
- b. A minimum of 20 separate sampling events, minimum of 2 per month, must be taken per each NPDES outfall. If the number of events through August 2012 is less than 20, then samples must be taken for all discharge events after that date. The sampling events must be representative of the discharge and should include a range of discharge types, including dry weather, low flow and high flow discharges that occur during wet weather/ precipitation events. Precipitation amounts and any flow conditions must be recorded per each sampling event. Provide an estimated flow rate during each event.

D. Perform field quality control sampling.

1. Protocols:

In addition to meeting all of the quality assurance and quality control requirements referenced above, including but not limited to 40 C.F.R. Part 136, the following shall be used with regard to all field quality control sampling:

- a. IDEM Survey Section Field Procedure Manual, the IDEM Assessment Branch Summary of Protocols: Probability Based Site Assessments referenced in 2(A) above. This document can be found at:  
<http://monitoringprotocols.pbworks.com/f/IDEM+sum+of+protocols.pdf>

2. Sampling requirements:

- a. This includes the following: 10 percent of the water samples shall be collected as field duplicates. One water quality probe monitoring location will have two instruments placed in the waterway as field duplicates. Field blanks shall occur at a minimum of 5 percent of the water samples. Field instruments shall be calibrated daily, using manufacturer guidelines and requirements noted above. Follow appropriate methods based on sampling protocols such as: field duplicates, blanks, daily calibration.
4. The biological monitoring and sampling shall address the component listed below, in accordance with the protocols and the sampling requirement listed below:

A. Perform a biological community assessment.

1. Sampling location and frequency:

Biological monitoring and sampling must be developed and implemented for any areas that were not previously assessed and submitted to EPA pursuant to EPA's October 12, 2011 information request under Section 308 of the CWA issued to Peabody. Specifically, biological monitoring and sampling must be developed and implemented at points immediately downstream from the NPDES outfalls within Peabody's SMCRA Permit S-256 amendment nos. 1, 2, 3 and 4, but upstream from any tributaries that may dilute the sample. All biological sampling must be conducted in mid-summer of 2012.

2. Protocols:

For fish sampling:

- a. Indiana Department of Environmental Management (IDEM) Office of Water Quality, Assessment Branch, *Summary of Protocols: Probability Based Site Assessment*, Draft, July 28, 2005. See Section 5.0: Fish Community Assessment. This document can be found at:  
<http://monitoringprotocols.pbworks.com/f/IDEM+sum+of+protocols.pdf>.
- b. U.S. Environmental Protection Agency, *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish, Second Edition*. EPA 841-b-99-002. U. S. Environmental Protection Agency; Office of Water, Washington, D.C.

For macroinvertebrates sampling:

- a. IDEM Office of Water Quality, Watershed Planning and Assessment Branch, Biological Studies Section, Multi-habitat (MHAB) *Macroinvertebrate Collection Procedure* (S-001-OWQ-W-BS-10-T-R0), Technical Standard Operating Procedure, October 30, 2010. This document can be found at:  
<http://monitoringprotocols.pbworks.com/f/S-001-OWQ-W-BS-10-SR0.pdf>.

- b. U.S. Environmental Protection Agency, *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish, Second Edition*. EPA 841-b-99-002. U. S. Environmental Protection Agency; Office of Water, Washington, D.C.

3. Sampling requirement:

- a. Macroinvertebrates shall be collected from their natural habitats, and not on artificial samplers.

5. The physical habitat monitoring and sampling shall address the component listed below, in accordance with the protocols and the sampling requirements listed below:

A. Perform a stream physical habitat evaluation.

1. Sampling location and frequency:

Physical habitat monitoring and sampling must be developed and implemented for any areas that were not previously assessed and submitted to EPA pursuant to EPA's October 12, 2011 information request under Section 308 of the CWA issued to Peabody. Specifically, physical habitat monitoring and sampling must be developed and implemented at points immediately upstream and downstream from the NPDES outfalls within Peabody's SMCRA Permit S-256 amendment nos. 1, 2, 3 and 4. Sampling should occur as close to the outfalls as possible but remain outside any area of turbulent mixing, and be conducted during stream flow conditions that resemble discharge conditions. The downstream sampling locations must be upstream from any tributaries that may dilute the sample.

2. Protocols:

Physical habitat shall be evaluated using the Qualitative Habitat Evaluation Index (QHEI), as appropriate, used by IDEM for streams and rivers in Indiana, as referenced below:

The following shall be used with regard to habitat assessment protocols:

- a. Qualitative Habitat Evaluation Index (QHEI); Rationale, Methods, and Application (Rankin 1989).

The following shall be used with regard to habitat evaluation protocols:

IDEM Office of Water Quality, Assessment Branch, Biological Studies Section, *Biological Studies Section Qualitative Habitat Evaluation Index (QHEI)*, S-001-OWQ-A-BS-06-S-R1, Draft December 11, 2006. This document can be found at:

<http://monitoringprotocols.pbworks.com/f/IDEM+QHEI+SOP.pdf>

3. Sampling requirements:
- a. One sampling event per each NPDES outfall location specified in no. 1(A), above, shall be conducted to characterize the stream morphology and substrate conditions. A sampling event consists of both upstream and downstream sampling.
  - b. Bench notes and photographic evidence for each sampling event shall be recorded and submitted as part of the report described in no. 6, below.
6. Produce and submit a detailed report for the water quality, physical habitat, and biological monitoring and sampling in accordance with the requirements identified in this request. The reports should address each component listed above, and should include all sample results and analyses.
7. Provide a copy of all biological monitoring and sampling data for SMCRA Permit S-256 amendment nos. 1, 2, 3 and 4, that was not previously submitted to EPA pursuant to EPA's October 12, 2011 information request under Section 308 of the CWA issued to Peabody.
8. Provide a narrative and flow map/diagram that identifies the below listed areas where process water is generated and describes/illustrates how the water is conveyed (e.g., pipe, overland flow) and managed (e.g., pond/impoundment, discharged through outfall #, overland flow to surface water/wetland, infiltration, etc.) for the Bear Run Mine:
- A. Coal preparation plant areas and associated areas (excluding coal refuse piles);
  - B. Active mine areas with a pH greater than 6 prior to treatment;
  - C. Active mine areas with a pH less than 6 prior to treatment;
  - D. Wastewater from coal refuse piles;
  - E. Controlled surface mine drainage wastewater;
  - F. Non-controlled surface mine drainage wastewater;
  - G. Steep slope removal areas; and
  - H. Reclamation areas.
9. Provide a table that lists all process water discharge locations in no. 8, above, and identify:
- A. Outfall numbers;
  - B. NPDES permit number for discharge locations;
  - C. Date range of operation;
  - D. Description (e.g., dry weather, discharge for pond #, etc.);
  - E. Latitude/longitude of discharge location;
  - F. Name of receiving water;
  - G. How the discharge is conveyed to the receiving water (e.g., ditch or other manmade conveyance, overland flow, etc.); and
  - H. Whether the discharge location is within 500 yards upstream of a water supply intake.

10. Provide a table that identifies by name all ponds/impoundments that are used to manage process water. For each pond/impoundment, include the areas identified in no. 8, above, that contribute process water. For each pond/impoundment, identify whether any areas contribute process wastewater from mining operations associated with mines other than the Bear Run mine.

11. For each pond/impoundment, provide:

A. Design plan, cross section, and basis for design that also includes:

1. A water balance to account for flows entering and exiting the pond/impoundment during dry weather as well as wet weather events;
2. Each permitted (by number) and unpermitted outflow location; and
3. Sampling locations during dry and/or wet weather conditions.

B. A narrative describing each outflow location and associated sampling point and also identifies how water flows out of each location identified in 11(A), above, (e.g., pipe(s), porous material, overflow, etc.).

C. A description of how the pond/impoundment will function during dry weather and wet weather including the 1 year, 24 hour; 3 year, 24 hour; or the 10 year, 24 hour storm events, if applicable.

**ENCLOSURE 2**

**STATEMENT OF CERTIFICATION**

I certify that the information contained in or accompanying this submission is true, accurate, and complete.

As to the identified portion(s) of this submission for which I cannot personally verify its truth and accuracy, I certify as the company official having supervisory responsibility for the person(s) who, acting under my direct instructions, made the verification, that this information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

By \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

## ENCLOSURE 3

### Confidential Business Information (CBI) Assertion and Substantiation Requirements

#### Assertion Requirements

You may assert a business confidentiality claim covering all or part of the information requested in the Enclosed letter, as provided in 40 C.F.R. § 2.203(b). To make a confidentiality claim, submit the requested information and indicate that you are making a claim of confidentiality. Any document over which you make a claim of confidentiality should be marked by placing on or attaching to the information, at the time it is submitted to EPA, a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret" or "proprietary" or "company confidential" and a date, if any, when the information should no longer be treated as confidential. Information covered by such a claim will be disclosed by the EPA only to the extent permitted and by means of the procedures set forth by Section 308 of the CWA, and 40 C.F.R. Part 2. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified. EPA will construe the failure to furnish a confidentiality claim with your response to the attached letter as a waiver of that claim, and the information may be made available to the public without further notice to you.

Please segregate personnel, medical and similar files from your responses and include that information on separate sheet(s) marked as "Personal Privacy Information," given that disclosure of such information to the general public may constitute an invasion of privacy.

#### Substantiation Requirements

All confidentiality claims are subject to EPA verification and must be made in accordance with 40 C.F.R. § 2.208 which provides in part that you satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; and that the information is not and has not been reasonably obtainable by legitimate means without your consent.

Pursuant to 40 C.F.R. Part 2, Subpart B, EPA may at any time send you a letter asking you to substantiate fully your CBI claim. You must provide EPA with a response within the number of days set forth in the EPA request letter. Failure to submit your comments within that time will be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information. EPA will ask you to specify which portions of the information you consider confidential. **You must be specific by page, paragraph, and sentence when identifying the information subject to your claim.** Any information not specifically identified as subject to a confidentiality claim may be disclosed to the requestor without further notice to you. For each item or class of information that you identify as being subject to CBI, EPA will ask you to answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question 1 above?

- A. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
- B. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
- C. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
- D. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?

Please note that effluent data provided under Section 308 of the CWA, 33 U.S.C. § 1318, is not entitled to confidential treatment under 40 C.F.R. Part 2. "Effluent data" means, with reference to any source of discharge of pollutant (as that term is defined in Section 502(6) of the CWA, 33 U.S.C. 1362(6)):

Information necessary to determine the identity, amount, frequency, concentration, temperature, or other characteristics (to the extent related to water quality) of any pollutant which has been discharged by the source (of any pollutant resulting from any discharge from the source), or any combination of the foregoing;

Information necessary to determine the identity, amount, frequency, concentration, temperature, or other characteristics (to the extent related to water quality) of the pollutants which, under an applicable standard or limitation, the source was authorized to discharge (including, to the extent necessary for such purpose, a description of the manner or rate of operation of the source); and

A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. § 2.302 (a)(2)(i)(A), (B) and (C).

**ENCLOSURE 4**

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## U.S. EPA Small Business Resources Information Sheet

The United States Environmental Protection Agency provides an array of resources, including workshops, training sessions, hotlines, websites and guides, to help small businesses understand and comply with federal and state environmental laws. In addition to helping small businesses understand their environmental obligations and improve compliance, these resources will also help such businesses find cost-effective ways to comply through pollution prevention techniques and innovative technologies.

### EPA's Small Business Websites

Small Business Environmental Homepage - [www.smallbiz-enviroweb.org](http://www.smallbiz-enviroweb.org)

Small Business Gateway - [www.epa.gov/smallbusiness](http://www.epa.gov/smallbusiness)

EPA's Small Business Ombudsman - [www.epa.gov/sbo](http://www.epa.gov/sbo) or 1-800-368-5888

#### EPA's Compliance Assistance Homepage

[www.epa.gov/compliance/assistance/  
business.html](http://www.epa.gov/compliance/assistance/business.html)

This page is a gateway to industry and statute-specific environmental resources, from extensive web-based information to hotlines and compliance assistance specialists.

#### EPA's Compliance Assistance Centers [www.assistancecenters.net](http://www.assistancecenters.net)

EPA's Compliance Assistance Centers provide information targeted to industries with many small businesses. They were developed in partnership with industry, universities and other federal and state agencies.

#### Agriculture

[www.epa.gov/agriculture/](http://www.epa.gov/agriculture/)

#### Automotive Recycling

[www.ecarcenter.org](http://www.ecarcenter.org)

#### Automotive Service and Repair

[www.ccar-greenlink.org](http://www.ccar-greenlink.org) or 1-888-GRN-LINK

#### Chemical Manufacturing

[www.chemalliance.org](http://www.chemalliance.org)

#### Construction

[www.cicacenter.org](http://www.cicacenter.org) or 1-734-995-4911

#### Education

[www.campuserc.org](http://www.campuserc.org)

#### Food Processing

[www.fpeac.org](http://www.fpeac.org)

#### Healthcare

[www.hercenter.org](http://www.hercenter.org)

#### Local Government

[www.lgean.org](http://www.lgean.org)

#### Metal Finishing

[www.nmfrc.org](http://www.nmfrc.org)

#### Paints and Coatings

[www.paintcenter.org](http://www.paintcenter.org)

#### Printed Wiring Board Manufacturing

[www.pwbrc.org](http://www.pwbrc.org)

#### Printing

[www.pneac.org](http://www.pneac.org)

#### Ports

[www.portcompliance.org](http://www.portcompliance.org)

#### U.S. Border Compliance and Import/Export Issues

[www.bordercenter.org](http://www.bordercenter.org)

#### Hotlines, Helplines and Clearinghouses

[www.epa.gov/epahome/hotline.htm](http://www.epa.gov/epahome/hotline.htm)

EPA sponsors many free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements. Some examples are:

#### Antimicrobial Information Hotline

[info-antimicrobial@epa.gov](mailto:info-antimicrobial@epa.gov) or  
1-703-308-6411

#### Clean Air Technology Center (CATC) Info-line

[www.epa.gov/ttn/catc](http://www.epa.gov/ttn/catc) or 1-919-541-0800

#### Emergency Planning and Community Right-To-Know Act

[www.epa.gov/superfund/resources/  
infocenter/epcra.htm](http://www.epa.gov/superfund/resources/infocenter/epcra.htm) or 1-800-424-9346

#### EPA Imported Vehicles and Engines Public Helpline

[www.epa.gov/otaq/imports](http://www.epa.gov/otaq/imports) or  
734-214-4100

#### National Pesticide Information Center

[www.npic.orst.edu/](http://www.npic.orst.edu/) or 1-800-858-7378

#### National Response Center Hotline -

to report oil and hazardous substance spills  
[www.nrc.uscg.mil](http://www.nrc.uscg.mil) or 1-800-424-8802

#### Pollution Prevention Information Clearinghouse (PPIC)

[www.epa.gov/opptintr/ppic](http://www.epa.gov/opptintr/ppic) or  
1-202-566-0799

#### Safe Drinking Water Hotline

[www.epa.gov/safewater/hotline/index.  
html](http://www.epa.gov/safewater/hotline/index.html) or 1-800-426-4791

#### Stratospheric Ozone Protection Hotline

[www.epa.gov/ozone](http://www.epa.gov/ozone) or 1-800-296-1996

## U. S. EPA Small Business Resources

**Toxic Substances Control Act (TSCA) Hotline**  
tsc hotline@epa.gov or 1-202-554-1404

**Wetlands Information Helpline**  
www.epa.gov/owow/wetlands/wetline.html or 1-800-832-7828

### State and Tribal Web-Based Resources

**State Resource Locators**  
www.envcap.org/statetools

The Locators provide state-specific contacts, regulations and resources covering the major environmental laws.

**State Small Business Environmental Assistance Programs (SBEAPs)**  
www.smallbiz-enviroweb.org

State SBEAPs help small businesses and assistance providers understand environmental requirements and sustainable business practices through workshops, trainings and site visits. The website is a central point for sharing resources between EPA and states.

**EPA's Tribal Compliance Assistance Center**  
www.epa.gov/tribalcompliance/index.html

The Center provides material to Tribes on environmental stewardship and regulations that might apply to tribal government operations.

**EPA's Tribal Portal**  
www.epa.gov/tribalportal/

The Portal helps users locate tribal-related information within EPA and other federal agencies.

### EPA Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations before an enforcement action has been initiated, businesses may be eligible for penalty waivers or reductions. EPA has two such policies that may apply to small businesses:

**EPA's Small Business Compliance Policy**  
www.epa.gov/compliance/incentives/smallbusiness/index.html

This Policy offers small businesses special incentives to come into compliance voluntarily.

**EPA's Audit Policy**  
www.epa.gov/compliance/incentives/auditing/auditpolicy.html

The Policy provides incentives to all businesses that voluntarily discover, promptly disclose and expeditiously correct their noncompliance.

### Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established a SBREFA Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. If you believe that you fall within the Small Business Administration's definition of a small business (based on your North American Industry Classification System designation, number of employees or annual receipts, as defined at 13 C.F.R. 121.201; in most cases, this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities, call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247), or go to their website at [www.sba.gov/ombudsman](http://www.sba.gov/ombudsman).

Every small business that is the subject of an enforcement or compliance action is entitled to comment on the Agency's actions without fear of retaliation. EPA employees are prohibited from using enforcement or any other means of retaliation against any member of the regulated community in response to comments made under SBREFA.

### Your Duty to Comply

If you receive compliance assistance or submit a comment to the SBREFA Ombudsman or Regional Fairness Boards, you still have the duty to comply with the law, including providing timely responses to EPA information requests, administrative or civil complaints, other enforcement actions or communications. The assistance information and comment processes do not give you any new rights or defenses in any enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under any of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also, remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

*EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act or related provisions.*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

NOV 19 2010

REPLY TO THE ATTENTION OF:  
WN-16J

Bruno Pigott, Assistant Commissioner  
Office of Water Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Mail Code IGCN 1315  
Indianapolis, Indiana 46204-2251

Re: Peabody Midwest Mining's Bear Run Coal Mine

Dear Mr. Pigott:

The U.S. Environmental Protection Agency Region 5 has reviewed information on the quality of surface water and discharges within the Busseron Creek watershed, located in Sullivan County. We obtained the information from your Department, the Indiana Department of Natural Resources, and EPA's Integrated Compliance Information System. The review shows that several streams within the Peabody Midwest Mining Bear Run Coal Mine site (S-256) do not meet water quality standards, with sulfates and total dissolved solids (TDS) listed as potential causes of the nonattainment (enclosure 1). It further shows: (1) elevated levels of sulfates and TDS in the bodies of water to which Peabody discharges from Bear Run (enclosures 2 and 3); and (2) effluent violations for iron, pH, and TDS (enclosure 4) under Peabody's National Pollutant Discharge Elimination System permit (ING040127).

EPA believes this information shows that discharges from the Bear Run Mine may cause, have reasonable potential to cause, or contribute to excursions of the numeric and narrative criteria within Indiana's water quality standards. Consequently, pursuant to 327 Indiana Administrative Code (IAC) 15-2-9, we recommend that the Indiana Department of Environmental Management (IDEM) require Peabody to obtain an individual NPDES permit for this Mine. As you know, 327 IAC 15-2-9 authorizes IDEM's Commissioner to require an individual permit when, among other circumstances, the applicable requirements contained in article 15 are not adequate to ensure compliance with water quality standards under 327 IAC 2-1 or 327 IAC 2-1.5.

An application for an individual permit would require, among other things, a complete characterization of the wastestream discharged from the Mine. This monitoring data would inform the determination of any necessary permit limits under 40 CFR § 122.44(d) (see also 40 CFR § 123.25(a)(15)).

EPA's recommendation is based on the data provided with this letter as well as the emerging science regarding the impacts of surface coal mining on water quality. Scientific



literature has increasingly recognized the relationship between discharges from surface coal mining operations and downstream water quality impairments (enclosure 5).

We are available to discuss this matter and to assist Indiana in requiring and reviewing an individual permit application for this site in place of the general permit (ING040239) it currently operates under for its surface water discharges.

If you should have any questions regarding this letter, feel free to contact me or Kevin Pierard, Chief, NPDES Programs Branch, at (312) 886-4448.

Sincerely,

Tinka G. Hyde  
Director, Water Division

Enclosures

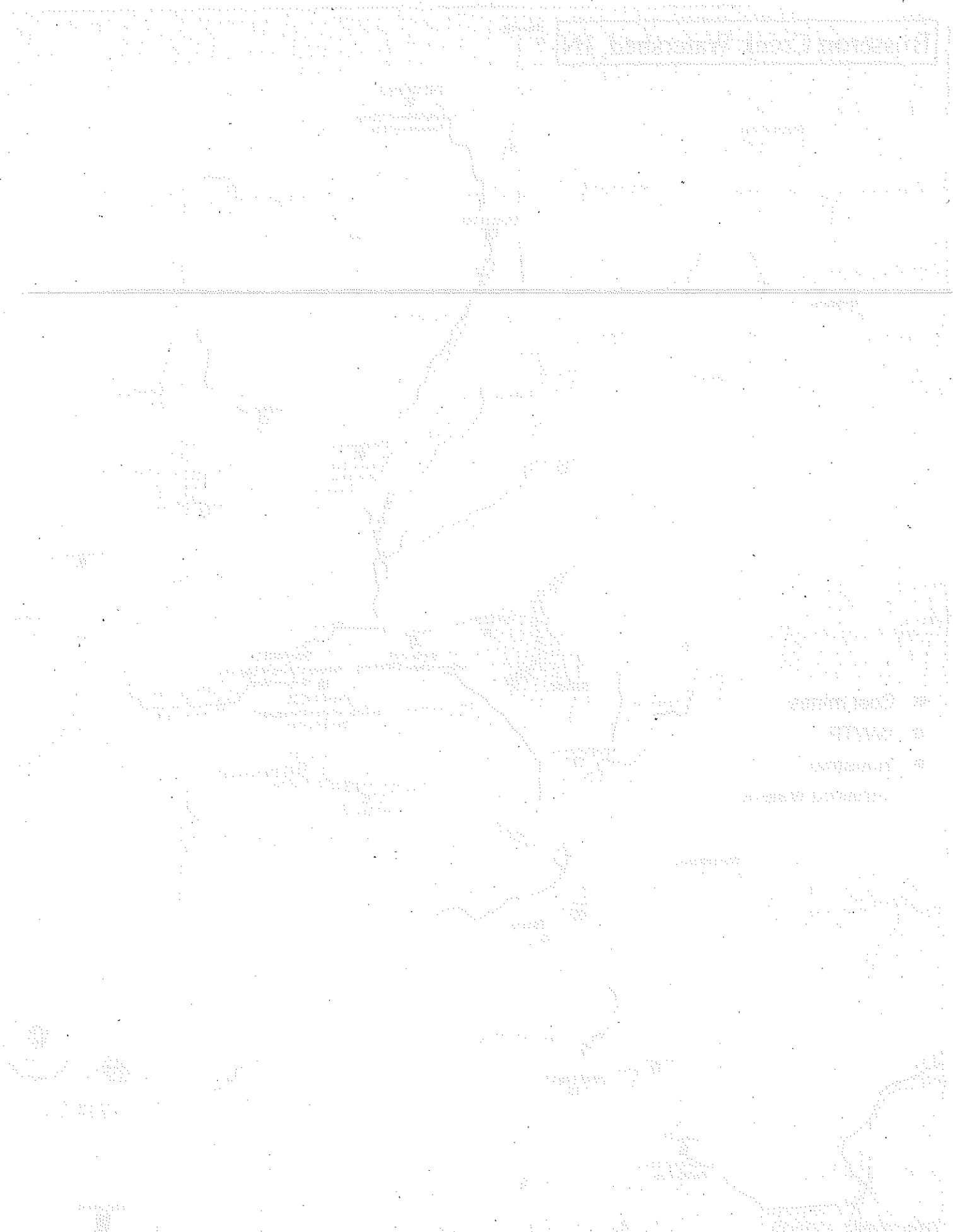
cc: David Phillips, Associate Director, IDNR  
Paul Higginbotham, IDEM

G:/NPDES/Letter to Bruno Pigott.docx



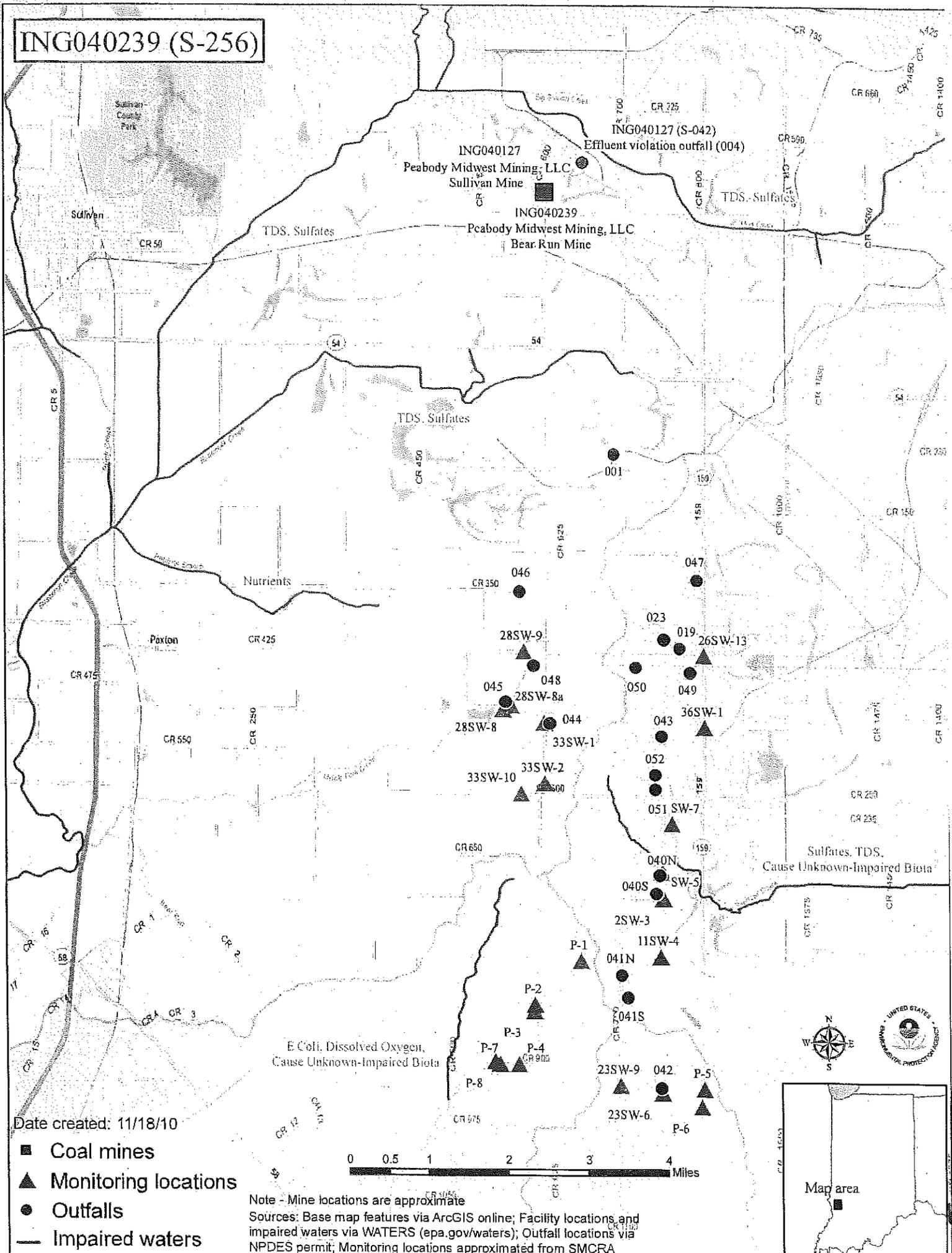


Map of the State of Georgia



Geographical information or legend text, possibly describing the map's scale or projection.

# ING040239 (S-256)



DEPARTMENT OF THE ARMY



- Contour lines
- Elevation
- Contour interval
- Spot elevation

1. The map shows the terrain of the area. The contour lines indicate the elevation of the land. The contour interval is 20 feet. The spot elevations are shown at various points on the map. The map is a technical drawing with a high level of detail, showing individual buildings, trees, and other features.

2. The map shows the roads and water bodies of the area. The roads are shown as solid lines, and the water bodies are shown as blue areas. The map is a technical drawing with a high level of detail, showing individual buildings, trees, and other features.

Enclosure 3:  
Water Quality Data in  
Bear Run Mine Discharge Receiving Waters

Site	Parameter	N	Baseline	Active	Inactive	Min	Max	Avg
11SW-4	Acid	6	0	6	0	50	184	111.17
11SW-4	Alkalinity	6	0	6	0	60	217	131.67
11SW-4	Field_pH	6	0	6	0	6.7	7.8	7.15
11SW-4	Flow_Rate	6	0	6	0	0.062	1.4	0.50
11SW-4	Iron	6	0	6	0	0.23	0.89	0.43
11SW-4	Lab_pH	5	0	5	0	7.5	8.2	7.78
11SW-4	Manganese	6	0	6	0	0.1	0.32	0.21
11SW-4	TDS	6	0	6	0	180	1040	555.00
11SW-4	Temperature	6	0	6	0	4	17	10.00
11SW-4	TotSusS	6	0	6	0	<3	39	11.00
23SW-6	Acid	6	0	6	0	100	316	187.8333333
23SW-6	Alkalinity	6	0	6	0	118	349	211.50
23SW-6	Field_pH	6	0	6	0	6.8	8.1	7.28
23SW-6	Flow_Rate	6	0	6	0	0	6.16	1.05
23SW-6	Iron	6	0	6	0	0.15	1.66	0.53
23SW-6	Lab_pH	6	0	6	0	7.6	8.4	7.97
23SW-6	Manganese	6	0	6	0	0.09	0.75	0.25
23SW-6	TDS	6	0	6	0	640	1890	1313.33
23SW-6	Temperature	6	0	6	0	3	17	10.33
23SW-6	TotSusS	6	0	6	0	3	78	20.00
23SW-9	Acid	1	0	1	0	-80	-80	-80
23SW-9	Alkalinity	1	0	1	0	96	96	96
23SW-9	Field_pH	1	0	1	0	7.3	7.3	7.3
23SW-9	Flow_Rate	6	0	6	0	0	0.11	0.02
23SW-9	Iron	1	0	1	0	0.2	0.2	0.2
23SW-9	Lab_pH	1	0	1	0	7.6	7.6	7.6
23SW-9	Manganese	1	0	1	0	0.022	0.022	0.022
23SW-9	TDS	1	0	1	0	140	140	140
23SW-9	Temperature	1	0	1	0	14	14	14
23SW-9	TotSusS	1	0	1	0	3	3	3
26SW-13	Acid	7	0	7	0	32	384	119.5714286
26SW-13	Alkalinity	7	0	7	0	54	412	147.86
26SW-13	Field_pH	7	0	7	0	7	8.3	7.36
26SW-13	Flow_Rate	12	0	12	0	0	1	0.29
26SW-13	Iron	7	0	7	0	0.13	0.75	0.46
26SW-13	Manganese	7	0	7	0	0.03	0.96	0.24
26SW-13	TDS	7	0	7	0	120	2710	753.57
26SW-13	TotSusS	7	0	7	0	1	12	4.29
28SW-8	Acid	6	0	6	0	2	244	67.06666667
28SW-8	Alkalinity	6	0	6	0	25.6	264	102.1333333
28SW-8	Field_pH	9	0	8	1	6.77	8.2	7.43
28SW-8	Flow_Rate	10	0	9	1	0	4.6	1.00
28SW-8	Iron	9	0	8	1	0.25	10.1	2.067777778
28SW-8	Lab_pH	9	0	8	1	6.9	8.25	7.528888889
28SW-8	Manganese	9	0	8	1	0.04	1.52	0.607777778
28SW-8	TDS	9	0	8	1	140	1185	543.3333333

Enclosure 3:  
Water Quality Data in  
Bear Run Mine Discharge Receiving Waters

Parameter	N	Baseline	Active	Inactive	Min	Max	Avg
Temperature	4	0	3	1	5	26	17
TotSusS	9	0	8	1	1	244	40.55555556
Field_pH	3	0	3	0	7.9	8.3	8.033333333
Flow_Rate	3	0	3	0	0.2	0.33	0.29
Iron	2	0	2	0	0.47	0.83	0.65
Lab_pH	2	0	2	0	7.81	8.17	7.99
Manganese	2	0	2	0	0.72	2.48	1.60
TDS	2	0	2	0	948	986	967.00
Temperature	3	0	3	0	2	7	4.00
TotSusS	2	0	2	0	10	12	11.00
Acid	6	0	6	0	2	200	63.5
Alkalinity	6	0	6	0	30	216	91.66666667
Field_pH	6	0	6	0	6.9	7.8	7.233333333
Flow_Rate	8	0	8	0	0	0.5	0.12
Iron	6	0	6	0	0.18	4.57	1.06
Manganese	6	0	6	0	0.02	0.16	0.088333333
TDS	6	0	6	0	165	410	273.3333333
TotSusS	6	0	6	0	1	104	22.33333333
Acid	6	0	6	0	18	32	25.16666667
Alkalinity	6	0	6	0	36	53	44.00
Field_pH	8	0	7	1	6.7	8.4	7.46
Flow_Rate	11	0	10	1	0	6.62	0.66
Iron	8	0	7	1	0.14	1.54	0.48
Lab_pH	8	0	7	1	6.7	8.4	7.65
Manganese	8	0	7	1	0.02	0.25	0.08
TDS	8	0	7	1	100	2029	529.88
Temperature	8	0	7	1	3	18	10.38
TotSusS	8	0	7	1	4	200	31.75
Acid	1	0	1	0	-36	-36	-36
Alkalinity	1	0	1	0	54	54	54
Field_pH	1	0	1	0	7.5	7.5	7.5
Flow_Rate	7	0	7	0	0	0.06	0.01
Iron	1	0	1	0	0.75	0.75	0.75
Lab_pH	1	0	1	0	7.2	7.2	7.2
Manganese	1	0	1	0	0.035	0.035	0.035
TDS	1	0	1	0	170	170	170
Temperature	1	0	1	0	13	13	13
TotSusS	1	0	1	0	9	9	9
Acid	4	0	4	0	-62	-41	-54.75
Alkalinity	4	0	4	0	54	80	69.50
Field_pH	6	0	6	0	6.9	8.1	7.57
Flow_Rate	8	0	8	0	0	0.77	0.15
Iron	6	0	6	0	0.31	1.93	0.70
Lab_pH	6	0	6	0	6.8	7.7	7.23
Manganese	6	0	6	0	0.035	2.18	0.64
TDS	6	0	6	0	200	2842	1113.17

Enclosure 3:  
Water Quality Data in  
Bear Run Mine Discharge Receiving Waters

Site	Parameter	N	Baseline	Active	Inactive	Min	Max	Avg
2SW-7	Temperature	6	0	6	0	6	24	16.00
2SW-7	TotSusS	6	0	6	0	3	330	68.67
33SW-1	Acid	5	0	5	0	28	194	122.8
33SW-1	Alkalinity	5	0	5	0	40	210	143
33SW-1	Field_pH	7	0	7	0	6.7	8.1	7.342857143
33SW-1	Flow_Rate	8	0	8	0	0	0.93	0.18
33SW-1	Iron	7	0	7	0	0.09	1.41	0.401428571
33SW-1	Lab_pH	7	0	7	0	7	8	7.692857143
33SW-1	Manganese	7	0	7	0	0.29	0.85	0.501428571
33SW-1	TDS	7	0	7	0	110	2565	925.4285714
33SW-1	Temperature	7	0	7	0	6	16	10.28571429
33SW-1	TotSusS	7	0	7	0	3	110	26
33SW-10	Acid	5	0	5	0	-160	-1	-87.4
33SW-10	Alkalinity	5	0	5	0	91.99999	192	137.20
33SW-10	Field_pH	5	0	5	0	7	8.1	7.68
33SW-10	Flow_Rate	6	0	6	0	0	0.31	0.13
33SW-10	Iron	5	0	5	0	0.11	0.79	0.33
33SW-10	Lab_pH	5	0	5	0	7.6	7.8	7.70
33SW-10	Manganese	5	0	5	0	0.052	0.33	0.13
33SW-10	TDS	10	0	10	0	220	360	272.90
33SW-10	Temperature	4	0	4	0	2	17	8.75
33SW-10	TotSusS	5	0	5	0	3	6	4.20
36SW-1	Acid	3	0	3	0	24	92	57.66666667
36SW-1	Alkalinity	3	0	3	0	52	110	89.66666667
36SW-1	Field_pH	3	0	3	0	7	7.5	7.3
36SW-1	Flow_Rate	9	0	9	0	0	0.2	0.03
36SW-1	Iron	3	0	3	0	0.3	1.49	0.756666667
36SW-1	Manganese	3	0	3	0	0.38	0.87	0.56
36SW-1	TDS	3	0	3	0	185	572	439
36SW-1	TotSusS	3	0	3	0	7	26	14
P-1	Acid	6	6	0	0	<10	<10	<10
P-1	Alkalinity	6	6	0	0	195.6	291.2	254.28
P-1	Chloride	6	6	0	0	4.8	11.3	6.98
P-1	Field_pH	6	6	0	0	7.08	8.28	7.86
P-1	Flow_Rate	6	6	0	0	0.02	0.7	0.17
P-1	Iron	6	6	0	0	0.15	4.25	1.05
P-1	Manganese	6	6	0	0	0.06	2.72	0.69
P-1	Sp_Con	6	6	0	0	1086	1893	1543.67
P-1	Sulfate	6	6	0	0	548	847	691.67
P-1	TDS	6	6	0	0	825	1640	1296.50
P-1	Temperature	1	1	0	0	28	28	28.00
P-1	TotSusS	6	6	0	0	1.7	35	10.70
P-2	Acid	6	6	0	0	<10	<10	<10
P-2	Alkalinity	6	6	0	0	43	52	46.32
P-2	Chloride	6	6	0	0	3	6.8	5.03
P-2	Field_pH	6	6	0	0	6.84	7.92	7.25

Enclosure 3:  
Water Quality Data in  
Bear Run Mine Discharge Receiving Waters

Parameter	N	Baseline	Active	Inactive	Min	Max	Avg
Iron	6	6	0	0	<0.05	0.37	0.22
Manganese	6	6	0	0	<0.05	0.29	0.10
Sp_Con	6	6	0	0	325	409	362.83
Sulfate	6	6	0	0	89	120	109.00
TDS	6	6	0	0	100	300	207.33
Temperature	1	1	0	0	32	32	32.00
TotSusS	6	6	0	0	<1	9.3	3.17
Acid	5	5	0	0	<10	<10	<10
Alkalinity	5	5	0	0	72.6	140.9	103.92
Chloride	5	5	0	0	4.7	7.4	6.12
Field_pH	5	5	0	0	6.96	8.33	7.65
Flow_Rate	1	1	0	0	0	0	0.00
Iron	5	5	0	0	0.53	4.82	1.74
Manganese	5	5	0	0	0.35	1.15	0.58
Sp_Con	5	5	0	0	520	1119	817.20
Sulfate	5	5	0	0	138	468	297.80
TDS	5	5	0	0	340	894	609.80
Temperature	1	1	0	0	33	33	33.00
TotSusS	5	5	0	0	8.2	52.7	30.08
Acid	2	2	0	0	<10	<10	<10
Alkalinity	2	2	0	0	55.5	60.3	57.90
Chloride	2	2	0	0	8.2	8.8	8.50
Field_pH	2	2	0	0	6.66	7.49	7.08
Flow_Rate	6	6	0	0	0	0.4	0.13
Iron	2	2	0	0	0.11	0.13	0.12
Manganese	2	2	0	0	<0.05	<0.05	<0.05
Sp_Con	2	2	0	0	286	319	302.50
Sulfate	2	2	0	0	89	89	89.00
TDS	2	2	0	0	125	240	182.50
TotSusS	2	2	0	0	<1	2.6	1.80
Acid	5	5	0	0	<10	<10	<10
Alkalinity	5	5	0	0	103.8	154.6	125.76
Chloride	5	5	0	0	12.5	16.5	14.62
Field_pH	5	5	0	0	7.07	8.27	7.81
Flow_Rate	1	1	0	0	0	0	0.00
Iron	5	5	0	0	0.12	0.3	0.21
Manganese	5	5	0	0	0.1	1.02	0.62
Sp_Con	5	5	0	0	1300	2519	1895.40
Sulfate	5	5	0	0	700	1426	1047.60
TDS	5	5	0	0	1160	2200	1705.00
Temperature	1	1	0	0	33	33	33.00
TotSusS	5	5	0	0	1.1	10.3	5.84
Acid	3	3	0	0	<10	<10	<10
Alkalinity	3	3	0	0	47.4	94.3	63.90
Chloride	3	3	0	0	12.3	16.1	13.80
Field_pH	3	3	0	0	7.62	7.74	7.66

Enclosure 3:  
Water Quality Data in  
Bear Run Mine Discharge Receiving Waters

Site	Parameter	N	Baseline	Active	Inactive	Min	Max	Avg
P-6	Flow_Rate	6	6	0	0	0	0.4	0.15
P-6	Iron	3	3	0	0	0.28	1.15	0.58
P-6	Manganese	3	3	0	0	0.09	0.26	0.15
P-6	Sp_Con	3	3	0	0	331	504	411.00
P-6	Sulfate	3	3	0	0	76	135	104.00
P-6	TDS	3	3	0	0	235	285	260.00
P-6	TotSusS	3	3	0	0	2.7	5.9	4.23
P-7	Acid	4	4	0	0	<10	<10	<10
P-7	Alkalinity	4	4	0	0	63.7	122.3	100.08
P-7	Chloride	4	4	0	0	10.1	21.2	15.18
P-7	Field_pH	4	4	0	0	6.47	7.46	7.11
P-7	Flow_Rate	6	6	0	0	0	3.5	0.86
P-7	Iron	4	4	0	0	0.36	2.41	1.32
P-7	Manganese	4	4	0	0	0.14	0.45	0.29
P-7	Sp_Con	3	3	0	0	230	364	309.00
P-7	Sulfate	4	4	0	0	34	120	68.00
P-7	TDS	4	4	0	0	105	368	205.25
P-7	Temperature	1	1	0	0	12	12	12.00
P-7	TotSusS	4	4	0	0	2.2	23.5	13.48
P-8	Acid	6	6	0	0	<10	<10	<10
P-8	Alkalinity	6	6	0	0	62.7	129.9	103.30
P-8	Chloride	6	6	0	0	4.5	14	8.68
P-8	Field_pH	6	6	0	0	6.47	7.91	7.31
P-8	Flow_Rate	6	6	0	0	0.25	4	1.34
P-8	Iron	6	6	0	0	0.6	2.04	0.88
P-8	Manganese	6	6	0	0	0.54	1.22	0.80
P-8	Sp_Con	6	6	0	0	258	751	548.33
P-8	Sulfate	6	6	0	0	43	320	189.17
P-8	TDS	6	6	0	0	156	620	359.83
P-8	Temperature	1	1	0	0	12	12	12.00
P-8	TotSusS	6	6	0	0	3.1	29	14.53
P-9	Acid	4	4	0	0	<10	<10	<10
P-9	Alkalinity	4	4	0	0	80	105	90.50
P-9	Chloride	4	4	0	0	14	17	15.50
P-9	Field_pH	4	4	0	0	7.51	8.04	7.80
P-9	Flow_Rate	4	4	0	0	0.04	0.4	0.17
P-9	Iron	4	4	0	0	0.15	1.1	0.41
P-9	Manganese	4	4	0	0	<0.02	0.11	0.06
P-9	Sp_Con	4	4	0	0	360	419	392.50
P-9	Sulfate	4	4	0	0	90	105	98.75
P-9	TDS	4	4	0	0	262	284	277.50
P-9	Temperature	4	4	0	0	1	6	3.00
P-9	TotSusS	4	4	0	0	<2	6	3.00
P-10	Acid	4	4	0	0	<10	<10	<10
P-10	Alkalinity	4	4	0	0	80	99	87.75
P-10	Chloride	4	4	0	0	9.5	12	10.38

Enclosure 3:  
Water Quality Data in  
Bear Run Mine Discharge Receiving Waters

Parameter	N	Baseline	Active	Inactive	Min	Max	Avg
Field_pH	4	4	0	0	7.4	7.98	7.79
Flow_Rate	4	4	0	0	0.01	0.14	0.09
Iron	4	4	0	0	0.09	0.31	0.19
Manganese	4	4	0	0	<0.02	0.04	0.03
Sp_Con	4	4	0	0	341	387	361.75
Sulfate	4	4	0	0	85	110	96.25
TDS	4	4	0	0	246	276	256.00
Temperature	4	4	0	0	1	6	3.50
TotSusS	4	4	0	0	<2	12	4.50
Acid	4	4	0	0	<10	<10	<10
Alkalinity	4	4	0	0	27	30	29.00
Chloride	4	4	0	0	1	12.1	11.53
Field_pH	4	4	0	0	7.43	8.27	7.72
Flow_Rate	4	4	0	0	0.04	0.6	0.31
Iron	4	4	0	0	0.15	0.33	0.20
Manganese	4	4	0	0	<0.02	0.08	0.05
Sp_Con	4	4	0	0	207	351	265.50
Sulfate	4	4	0	0	65	85	75.00
TDS	4	4	0	0	146	198	174.50
Temperature	4	4	0	0	1	6	3.50
TotSusS	4	4	0	0	<2	6	na
Acid	4	4	0	0	<10	<10	<10
Alkalinity	4	4	0	0	60	139	90.25
Chloride	4	4	0	0	13	16	14.48
Field_pH	4	4	0	0	7.18	8.02	7.67
Flow_Rate	4	4	0	0	0.02	0.21	0.07
Iron	4	4	0	0	0.83	0.98	0.87
Manganese	4	4	0	0	0.31	0.88	0.58
Sp_Con	4	4	0	0	572	1024	759.75
Sulfate	4	4	0	0	200	475	331.25
TDS	4	4	0	0	404	818	602.50
Temperature	4	4	0	0	2	7	4.25
TotSusS	4	4	0	0	<2	20	8.00

Enclosure 4:  
Effluent Violations  
Peabody Midwest Mining, LLC  
NPDES Permit # ING040127

Permit Name	NPDES ID	Expiration Date	vDisch-Desig	Limit Set Name	Perm Feature Type Desc	Limits Parameter Desc	Monitoring Location Desc	Statistical Base Short Desc	Limit Unit Desc	Limit Value Consolidation	DMR Value	Monitoring Period End Date	Percent Exceeden
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	004-A	ACID, S-042 004, MUD CREEK	External Outfall	Iron, total (as Fe)	Effluent Gross	DAILY AV	Milligrams per Liter	3	6.69	1/31/2007	123%
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	004-A	ACID, S-042 004, MUD CREEK	External Outfall	Iron, total (as Fe)	Effluent Gross	DAILY MX	Milligrams per Liter	6	15.65	1/31/2007	161%
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	004-A	ACID, S-042 004, MUD CREEK	External Outfall	Iron, total (as Fe)	Effluent Gross	DAILY AV	Milligrams per Liter	3	3.97	2/28/2007	32%
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	004-A	ACID, S-042 004, MUD CREEK	External Outfall	Iron, total (as Fe)	Effluent Gross	DAILY MX	Milligrams per Liter	6	7.63	2/28/2007	27%
FARMERSBURG MINE BEAR RUN EAST	ING040127	12/31/2005	011-A	SW1/4, SEC21, T8N, R8W	External Outfall	pH	Effluent Gross	DAILY MX	Standard Units	9	9.5	3/31/2005	%
FARMERSBURG MINE BEAR RUN EAST	ING040127	12/31/2005	011-A	SW1/4, SEC21, T8N, R8W	External Outfall	Solids, total suspended	Effluent Gross	DAILY AV	Milligrams per Liter	35	36.	8/31/2005	3%
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	011-A	ALK, S-042 011, BIG BRANCH	External Outfall	Solids, total suspended	Effluent Gross	DAILY AV	Milligrams per Liter	35	60.	1/31/2010	71%
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	012-A	ALK, S-042 012, MUD CR, SE1/4, SEC21, T8N, R8W,	External Outfall	Iron, total (as Fe)	Effluent Gross	DAILY AV	Milligrams per Liter	3	5.6	2/29/2008	87%
FARMERSBURG MINE BEAR RUN EAST	ING040127	12/31/2005	013-A	NE 1/4, SEC 3, T7N, R8W CASS F	External Outfall	pH	Effluent Gross	DAILY MX	Standard Units	9	9.4	3/31/2005	%
FARMERSBURG MINE BEAR RUN EAST	ING040127	12/31/2005	029-A	NE1/4, SEC31, CALEDONIA FIELD	External Outfall	pH	Effluent Gross	DAILY MX	Standard Units	9	9.32	3/31/2005	%
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	030-A	ALK, S-041 030, CASS, UNT TO BUTTERMILK CR	External Outfall	Iron, total (as Fe)	Effluent Gross	DAILY AV	Milligrams per Liter	3	10.2	11/30/2006	240%
PEABODY MIDWEST MINING LLC - SULLIVAN NORTH MINE	ING040127	1/31/2011	030-A	ALK, S-041 030, CASS, UNT TO BUTTERMILK CR	External Outfall	Iron, total (as Fe)	Effluent Gross	DAILY MX	Milligrams per Liter	6	10.2	11/30/2006	70%



Enclosure 5:

List of citations

Pond, G.J., M. E. Passmore, F.A. Borsuk, L. Reynolds, and C. J. Rose. 2008. Downstream effects of mountaintop coal mining: comparing biological conditions using family- and genus-level macroinvertebrate bioassessment tools. *J. N. Am. Benthol. Soc.*, 27(3):717-737.

Mount, D. R., D. D. Gulley, J. R. Hockett, T. D. Garrison, J. M. Evan. 1997. Statistical Models to Predict the Toxicity of Major Ions to *Ceriodaphnia Dubia*, *Daphnia Magna* and *Pimephales Promelas* (Fathead Minnows). *Env. Tox. Chem.* 16(10) 2009-2019.

Kennedy, 2003. Field and Laboratory Assessment of a Coal Processing Effluent in the Leading Creek Watershed, Meigs County, Ohio.

Section 1  
Introduction

The purpose of this study is to investigate the effects of various factors on the performance of a system. The study is divided into two main parts: a theoretical analysis and an experimental investigation. The theoretical analysis will focus on the underlying principles and models, while the experimental part will involve the design and execution of tests to validate the theoretical findings.

The experimental setup includes the selection of appropriate parameters and the use of specialized equipment to measure system performance. Data collected during the experiments will be analyzed to identify trends and correlations between the input variables and the system's output.

The results of the study are expected to provide valuable insights into the system's behavior under different conditions. These findings will be discussed in detail in the subsequent sections of the report.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAY 16 2012

REPLY TO THE ATTENTION OF

WN-16J

Mr. Bruno Pigott, Assistant Commissioner  
Office of Water Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Mail Code IGCN 1315  
Indianapolis, Indiana 46204-2251

Dear Mr. Pigott

Enclosed please find a protocol that describes the U.S. Environmental Protection Agency's plan for responding to the December 17, 2009 petition from the Environmental Law and Policy Center, Sierra Club, and Hoosier Environmental Council for corrective action or withdrawal of the Indiana National Pollutant Discharge Elimination System program. We look forward to working with you as we implement the enclosed protocol.

Please contact Janet Pellegrini of my staff or Maria Gonzalez, Office of Regional Counsel, if you have any questions. Ms. Pellegrini can be reached at (312) 886-4298 and Ms. Gonzalez can be reached at (312) 886-6630.

Sincerely,

A handwritten signature in black ink that reads "Tinka G. Hyde".

Tinka G. Hyde  
Director, Water Division

Enclosure

cc: Albert Ettinger  
Kim Ferraro, Hoosier Environmental Council  
Jessica Dexter, Environmental Law and Policy Center  
Bowden Quinn, Sierra Club



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAY 16 2012

REPLY TO THE ATTENTION OF

WN-16J

Kim Ferraro  
Hoosier Environmental Council  
3951 North Meridian Street, Suite 100  
Indianapolis, Indiana 46208

Dear Ms. Ferraro:

Thank you for your January 27, 2012, letter providing the petitioners' comments on the draft protocol for responding to issues raised in your December 17, 2009, petition for corrective action or withdrawal of the Indiana National Pollutant Discharge Elimination System program. We have taken your comments into account in the course of preparing the enclosed protocol.

The U.S. Environmental Protection Agency, Region 5, will proceed to implement the enclosed protocol. We will communicate the outcome to you when implementation is complete. Please contact Janet Pellegrini of my staff or Maria Gonzalez, Office of Regional Counsel, if you have any questions. Ms. Pellegrini can be reached at (312) 886-4298 and Ms. Gonzalez can be reached at (312) 886-6630.

Sincerely,

Tinka G. Hyde  
Director, Water Division

Enclosure

cc: Mr. Bruno Pigott, IDEM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAY 16 2012

REPLY TO THE ATTENTION OF:

WN-16J

Jessica Dexter  
Environmental Law & Policy Center  
35 East Wacker Drive, Suite 1300  
Chicago, Illinois 60601

Dear Ms. Dexter:

Thank you for your January 27, 2012, letter providing the petitioners' comments on the draft protocol for responding to issues raised in your December 17, 2009, petition for corrective action or withdrawal of the Indiana National Pollutant Discharge Elimination System program. We have taken your comments into account in the course of preparing the enclosed protocol.

The U.S. Environmental Protection Agency, Region 5, will proceed to implement the enclosed protocol. We will communicate the outcome to you when implementation is complete. Please contact Janet Pellegrini of my staff or Maria Gonzalez, Office of Regional Counsel, if you have any questions. Ms. Pellegrini can be reached at (312) 886-4298 and Ms. Gonzalez can be reached at (312) 886-6630.

Sincerely,

Tinka G. Hyde  
Director, Water Division

Enclosure

cc: Mr. Bruno Pigott, IDEM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAY 16 2012

REPLY TO THE ATTENTION OF:

WN-16J

Bowden Quinn  
Sierra Club, Hoosier Chapter  
1915 W. 18<sup>th</sup> Street, Suite D  
Indianapolis, Indiana 46202

Dear Mr. Quinn:

Thank you for your January 27, 2012, letter providing the petitioners' comments on the draft protocol for responding to issues raised in your December 17, 2009, petition for corrective action or withdrawal of the Indiana National Pollutant Discharge Elimination System program. We have taken your comments into account in the course of preparing the enclosed protocol.

The U.S. Environmental Protection Agency, Region 5, will proceed to implement the enclosed protocol. We will communicate the outcome to you when implementation is complete. Please contact Janet Pellegrini of my staff or Maria Gonzalez, Office of Regional Counsel, if you have any questions. Ms. Pellegrini can be reached at (312) 886-4298 and Ms. Gonzalez can be reached at (312) 886-6630.

Sincerely,

Tinka G. Hyde  
Director, Water Division

Enclosure

cc: Mr. Bruno Pigott, IDEM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAY 16 2012

REPLY TO THE ATTENTION OF:

WN-16J

Albert Ettinger  
53 West Jackson Boulevard, Suite 1664  
Chicago, Illinois 60604

Dear Mr. Ettinger:

Thank you for your January 27, 2012, letter providing the petitioners' comments on the draft protocol for responding to issues raised in your December 17, 2009, petition for corrective action or withdrawal of the Indiana National Pollutant Discharge Elimination System program. We have taken your comments into account in the course of preparing the enclosed protocol.

The U.S. Environmental Protection Agency, Region 5, will proceed to implement the enclosed protocol. We will communicate the outcome to you when implementation is complete. Please contact Janet Pellegrini of my staff or Maria Gonzalez, Office of Regional Counsel, if you have any questions. Ms. Pellegrini can be reached at (312) 886-4298 and Ms. Gonzalez can be reached at (312) 886-6630.

Sincerely,

Tinka G. Hyde  
Director, Water Division

Enclosure

cc: Mr. Bruno Pigott, IDEM

**Protocol for Correcting or Reviewing Issues Raised in the December 2009 Petition**  
from the  
Environmental Law and Policy Center, Sierra Club, and Hoosier Environmental Council  
April 2012

Protocol for Responding to Issues Related to Permitting

Allegation 1: The petition alleges that the Indiana Department of Environmental Management (IDEM) has failed to adopt antidegradation implementation rules and procedures.

The petitioners allege that Indiana was required to establish, under 40 C.F.R. § 131.12, rules to implement the Indiana antidegradation policy at Ind. Admin. Code tit. 327, r. 2-1-2. Indiana has indicated, the petitioners allege, that it could not implement the policy because it has no implementation procedures in place, except those covering the Lake Michigan basin.

Response: 40 C.F.R. part 131 applies to the water quality standards program. 40 C.F.R. § 131.12 requires the State to "identify" the methods for implementing their statewide antidegradation policy.

Indiana adopted a revised antidegradation policy and implementation rules in March 2012. Indiana is preparing the newly adopted rules for submittal to EPA for review under section 303(c) of the CWA, 33 U.S.C. § 1313(c)(3). EPA will review the rules submitted by Indiana for consistency with the federal regulations at 40 C.F.R. § 131.12 and part 132.

Allegation 2: The petition alleges that the draft implementation rule covering new or increased discharges in the Lake Michigan basin suffers from serious flaws, pointing to the NPDES permits for the U.S. Steel facility in Gary and the BP refinery in Whiting, and a December 2007 report by Professor A. James Barnes, who wrote that the draft rule lacked clarity.

Response: The Board's final adopted rule addresses discharges inside as well as outside the Lake Michigan basin. EPA will review the rule under Section 303(c)(3) of the Clean Water Act, 33 U.S.C. § 1313(c)(3), after submittal by the State.

EPA reviewed the draft permits for the U.S. Steel facility in Gary and the BP refinery in Whiting. We did not object to the BP Whiting permit. We objected to the U.S. Steel permit on the grounds that the State did not explain how certain new or increased limits satisfied the State's antidegradation policy. Indiana resolved the objection in 2009.

Allegation 3: The petition alleges that there are shortcomings with Indiana's draft antidegradation implementation rule.

Response: Indiana adopted a revised antidegradation policy and implementation rules in March 2012. Indiana is preparing the newly adopted rules for submittal to EPA for review under section 303(c) of the CWA, 33 U.S.C. § 1313(c)(3). EPA will review the rules submitted by Indiana for consistency with the federal regulations at 40 C.F.R. § 131.12 and part 132.

Allegation 4: The petition alleges that Indiana legislation has limited Indiana's authority to implement 40 C.F.R. § 131.12. Specifically, the petition questions: a) the approvability of the de minimis threshold at Ind. Code § 13-18-3-2(l); b) the antidegradation review by the Board contemplated by Ind. Code § 13-18-3-2(p); and c) the substantial weight that Ind. Code § 13-18-3-2(t) gives to discharge socioeconomic importance determinations by other governmental agencies.

- a. While it recognizes that EPA and the courts have approved de minimis thresholds, the petition alleges that such thresholds are narrowly drawn, that EPA's authority to approve them is limited, and that EPA cannot approve Indiana's method of implementing the de minimis exception at Ind. Code § 13-18-3-2(l).

Response: Ind. Code § 13-18-3-2(l) provides that the procedures to prevent degradation for an outstanding state resource water must include:

- (1) a definition of significant lowering of water quality that includes a de minimis quantity of additional pollutant load;
  - (A) for which a new or increased permit limit is required; and
  - (B) below which antidegradation implementation procedures do not apply.

The petition cites the Sixth Circuit's decision in *Kentucky Waterways Alliance v. Johnson*, 540 F. 3d 466 (6th Cir. 2008), to argue that IDEM's method of implementing this statutory de minimis exception cannot properly be approved. The petition does not challenge the de minimis exception itself. The courts have accepted a de minimis exception for antidegradation review. *Id.* at 484; *Ohio Valley Environmental Coalition v. Horinko*, 279 F. Supp. 2d 732, 769 (S.D. W. Va. 2003). Rather, the petition questions the approvability of the rule proposed for implementing the statutory exception.

Indiana adopted a revised antidegradation policy and implementation rules in March 2012. Indiana is preparing the newly adopted rules for submittal to EPA for review under section 303(c) of the CWA, 33 U.S.C. § 1313(c)(3). EPA will review the rules submitted by Indiana for consistency with the federal regulations at 40 C.F.R. § 131.12 and part 132.

- b. The petition objects that Ind. Code § 13-18-3-2(p) exempts activities covered by a general permit from undergoing an additional antidegradation review, after the antidegradation review of the rules authorizing general permits; and

questions the content of the rule review and the assurances it can provide with respect to individual discharges.

Response: Indiana amended Ind. Code § 13-18-3-2(p) in 2011 (see P.L. 81-2011, Sec. 1). The text now reads as follows:

This subsection applies to all surface waters of the state. The department shall complete an antidegradation review of all NPDES general permits. The department may modify the general permits for purposes of antidegradation compliance. After an antidegradation review of a permit is conducted under this subsection, activities covered by an NPDES general permit are not required to undergo an additional antidegradation review. An NPDES general permit may not be used to authorize a discharge into an outstanding national resource water or an outstanding state resource water, except that a short term, temporary storm water discharge to an outstanding national resource water or to an outstanding state resource water may be permitted under an NPDES general permit if the commissioner determines that the discharge will not significantly lower the water quality downstream of the discharge.

EPA approved the current Indiana program for issuing NPDES general permits in 1991. (The approval did not include Ind. Code § 13-18-1-2(a)(2)(B) as amended in 1998.) The current program provides for the issuance of permits as administrative rules adopted by the Indiana Water Pollution Control Board. The rule adoption process included notice to the public with an opportunity to comment on draft general permit rules.

By letter dated April 8, 2010, IDEM provided a plan through which Indiana is moving administration of its NPDES general permits program from the Indiana Water Pollution Control Board to IDEM. Consistent with the plan, Indiana enacted 2011 Ind. Act 81, and in October 2010, IDEM asked for comment on amendments to the general permit program rules in Ind. Admin. Code tit. 327, r. 15. The plan provides that IDEM will draft new general permits for the discharge categories presently addressed by the permits-by-rule in Ind. Admin. Code tit. 327, r. 15. (The State may elect to use individual permits rather than a general permit to authorize discharges from a particular category for which a general permit-by-rule now exists.) In March 2012, IDEM sent EPA via electronic mail an updated Draft Implementation schedule for their Office of Water Quality General Permits Project (see attached file).

EPA will review Ind. Code § 13-18-3-2(p). EPA will review each general permit that IDEM develops. To the extent that any such general permit would authorize a new or increased discharge to a body of water the quality of which is better than water quality standards, EPA will evaluate whether the permit satisfies Indiana's approved antidegradation policy.

c. The petition questions the substantial weight that Ind. Code § 13-18-3-2(t)(1) gives to determinations by governmental entities on the need to accommodate

important economic or social development, arguing that this improperly limits and delegates IDEM's authority.

Response: Giving weight to determinations by other governmental entities does not prevent IDEM from making its own determination.

Allegation 5: The petition questions the approval of permits in impaired watersheds, the lack of a ban on phosphorous fertilizers, and the designation of releases from concentrated animal feeding operations (CAFOs) as spills rather than discharges.

Response: Ind. Admin. Code tit. 327, r. 5-2-10(a)(4) provides that each NPDES permit shall provide for and ensure compliance with water quality standard based and other more stringent requirements, including those permit conditions necessary to achieve water quality standards established by the water pollution control board or by EPA in accordance with Sections 118 and 303 of the CWA. In addition, Ind. Admin. Code tit. 327, r. 5-2-7(f) provides that no permit may be issued to a new source or a new discharger if the discharge from the construction or operation of the facility will cause or contribute to the violation of water quality standards in the receiving waters, unless:

- (1) The commissioner has conducted a pollutant load allocation analysis for the pertinent segment of the receiving stream which will result in compliance with applicable water quality standards;
- (2) Sufficient pollutant load allocations remain to accommodate the proposed discharge and the permit contains effluent limitations consistent with the remaining allocations.
- (3) The commissioner has imposed schedules for compliance with the pollutant load allocation upon all existing dischargers into the segment.

The petition does not identify individual permits that allegedly do not comply with the Indiana rule provisions cited above. Nevertheless, EPA has reviewed or plans to review 13 draft permits for major Indiana dischargers in federal fiscal year 2012. EPA will determine whether any of the 13 discharge to impaired waters, and whether: (1) issuance of the permit(s) would meet 40 C.F.R. § 123.25(a)(1) (prohibitions), to the extent that this rule is applicable, or (2) includes conditions as may be required by 40 C.F.R. § 123.25(a)(15) (Establishing NPDES Permit Conditions).

IDEM's April 2010 and March 2012 plans provide that the State will draft new general permits for the discharge categories presently addressed by the permits-by-rule in Ind. Admin. Code tit. 327, r. 15. EPA will review each general permit that IDEM develops. To the extent that a general permit would authorize the discharge of a pollutant for which a waterbody is listed as impaired, EPA will evaluate the permit under 40 C.F.R. § 123.25(a)(1) and (15).

The Clean Water Act does not require states to ban phosphorus fertilizers.

The petition does not cite to specific instances in which IDEM characterized a release from a CAFO as a spill rather than a discharge. It does not allege that the State has not acted on CAFO violations or has not sought adequate penalties or collected administrative fines when imposed (*see* 40 C.F.R. § 123.63(a)(3)(i) and (ii))<sup>1</sup>.

The January 27, 2012 letter from the petitioners on the draft protocol asks EPA to review revisions to Indiana's NPDES administrative rules for CAFOs. While not part of the response to the petition, EPA will review the revisions under 40 C.F.R. § 123.62.

**Allegation 6:** The petition alleges that IDEM routinely issues discharge permits that are likely to degrade water quality. It alleges that IDEM has issued permits without appropriate consideration of the need for antidegradation and/or full satisfaction of public participation provisions, citing the City of Jefferson, the City of Austin, and the Town of McCordsville WWTP permits. The petition also alleges that IDEM issues general permits without regard to the impairment status of the watershed where the permitted operations are situated.

**Response:** With respect to public participation, 40 C.F.R. § 131.12(a)(1) requires satisfaction of the public participation provisions of the State's continuing planning process. The Petition does not cite to Indiana public participation provisions that the petitioners feel are not being met.

EPA will review application of the Indiana antidegradation policy to the Jefferson, Austin, and McCordsville permits. As mentioned in the response to Allegation 5, we have reviewed or plan to review application of the policy to 13 individual permits as well as the general permits that IDEM plans to draft.

**Allegation 7:** The Petition alleges that Indiana's general permits-by-rule allow discharges without providing an analysis of how the permits meet the antidegradation policy.

**Response:** This allegation echoes the allegation at 6, that the antidegradation analysis is conducted at the point when the general permits-by-rule are issued and not when a source is authorized under the permit-by-rule.

Under the April 2010 and March 2012 plans, IDEM will draft new general permits for the discharge categories presently addressed by the permits-by-rule in Ind. Admin. Code tit. 327, r. 15. EPA will review each general permit that IDEM develops. To the extent that any such general permit would authorize a new or increased discharge to a body of water the quality of which is better than water quality standards, EPA will evaluate whether the permit satisfies Indiana's antidegradation policy at Ind. Admin. Code tit. 327, r. 2-1-2.

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<sup>1</sup> In their January 27, 2012 letter, the petitioners said that the Indiana NPDES general permit-by-rule does not provide for an evaluation of CAFOs under 40 C.F.R. § 122.44(d). Please note that the permit, at 327 Ind. Adm. Code tit. 327 r. 15-15-4(f) provides that discharges from CAFOs must meet Indiana water quality standards.

Allegation 8: The Petition questions the appropriateness of allowing general permits by rule for coal mines.

Response: The federal regulations applicable to general permits, 40 C.F.R. § 122.28, do not categorically exclude coal mines from the potential to be authorized under general permits. IDEM plans to draft a new general permit for coal mines. EPA will review the permit to ensure that it contains all of the applicable conditions required by 40 C.F.R. § 123.25(a).

Allegation 9: The Petition questions the adequacy of the public comment period for general permits. Specifically, the petitioners appear to focus on a desire for public notice and comment when a facility seeks coverage under a general permit and not simply when the general permit is issued.

Response: As discussed above, the State is in the process of changing the way it issues general permits. With respect to public comment, 40 C.F.R. § 123.25 requires administration in conformance with, inter alia, 40 C.F.R. §§ 122.28 and 124.10(b). Under 40 C.F.R. § 124.10(b), the State must allow 30 days for public comment when it prepares a draft permit. The petition cites to the period allowed for comment on the application of a general permit to the particular facility, however, instead of the initial comment period allowed at the time of promulgation of the general permits-by-rule. With general permits, public comment takes place at the time the general permit is issued. Except for general permits issued to CAFOs (see 40 C.F.R. § 122.23(h)), public participation does not occur at the time a particular facility is authorized to discharge under that permit. For discharge categories other than CAFOs, federal regulations do not require a State to hold a public comment period at the time a facility submits a Notice of Intent to participate in the general permit. Moreover, 40 C.F.R. § 122.28 allows certain entities to be authorized to discharge under a general permit without submitting a Notice of Intent.

Allegation 10: The petition alleges that Indiana's permits-by-rule constitute repeated issuance of NPDES permits that do not conform to the requirements of the Act, citing the term of those permits beyond five years.

Response: By letter dated April 8, 2010, and e-mail dated March 14, 2012, IDEM provided a plan through which Indiana is moving administration of its NPDES general permits program from the Indiana Water Pollution Control Board to IDEM. Consistent with the plan, Indiana enacted 2011 Ind. Acts 81, and in October 2010, IDEM asked for comment on amendments to the general permit program rules in Ind. Admin. Code tit. 327, r. 15. The plan provides that IDEM will draft new general permits for the discharge categories presently addressed by the permits-by-rule in Ind. Admin. Code tit. 327, r. 15. EPA will review each such permit to ensure that they contain all of the applicable conditions required by 40 C.F.R. § 123.25(a). EPA expects that the duration of these permits will not exceed five years.

Protocol for Responding to Issues Related to Compliance Evaluation

**Allegation 11: The Petition questions IDEM's enforcement of the requirements of general permits, citing the number of mine inspections.**

**Response:** Under a September 2011 Memorandum of Understanding (MOU) that IDEM signed with the Indiana Department of Natural Resources (IDNR), IDEM issues NPDES permits to surface coal mining and reclamation operations and IDNR conducts monthly and quarterly inspections to check for compliance with these NPDES permits. EPA is reviewing the MOU and its implications for NPDES inspections and enforcement. EPA also intends to review IDEM's compliance and enforcement files for coal mines.

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May 23, 2012

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ZurichRE: Request for Information Pursuant to Section 308 of the Clean Water Act, 33 U.S.C. § 1318, regarding Peabody Midwest Mining, LLC - Bear Run Mine, Indiana (the "Information Request")  
Docket No. V-W-12-308-09

Dear Ms. Barton:

Pursuant to our ongoing discussions, with this letter, Peabody Midwest Mining, LLC ("Peabody") is submitting to the United States Environmental Protection Agency ("EPA"), consistent with the Agency's request, a proposed Effluent Sampling and Biomonitoring Assessment Plan (the "Plan") for Peabody's Bear Run Mine located in Sullivan County, Indiana. Specifically, the Plan (see Appendix A hereto) responds to EPA's March 22, 2012 Clean Water Act Section 308 request for information and subsequent technical discussions among Peabody and EPA personnel to develop an approach to proposed sampling that is mutually acceptable to the parties.

As you know from our discussions and as presented at our meeting on April 16, 2012, Peabody has significant legal and technical objections to EPA's request for sampling and assessment as set forth in the Agency's March 22<sup>nd</sup> 308 request. It is uncontroverted that Peabody is in full compliance with its Clean Water Act permitting obligations at Bear Run. This fact was confirmed for EPA through the reams of data provided to the Agency in response to the first Section 308 request for information issued to Peabody for Bear Run back in October of 2011. Discussions with representatives of the Indiana Department of Environmental Management ("IDEM") have likewise confirmed the Department's position that Peabody is currently complying with its Clean Water Act permitting obligations at Bear Run.

Notwithstanding the results of the submitted data and IDEM's repeated statements on Bear Run compliance, EPA's second request for information of March 22<sup>nd</sup> nonetheless requests Peabody to undertake exceedingly expansive water quality monitoring, biological, stream and habitat assessments, and effluent sampling in numerous watersheds at Bear Run. Peabody estimates that the cost to implement the work requested in the latest Section 308 request will exceed \$700,000.

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Peabody is troubled by the Agency's apparent motives in issuing not one, but two, 308 requests – the second of which being of unprecedented scope and extent – for an operation that has and continues to satisfy its Clean Water Act regulatory obligations. Peabody should not be placed in the middle of any EPA/IDEM dispute over the State's implementation of its Clean Water Act program, nor should this or any Section 308 request be used to advance philosophical debate over the nature of operations at Bear Run.<sup>1</sup> As such, Peabody respectfully disputes EPA's legal authority to enforce its March 22<sup>nd</sup> 308 request.

At our April 16<sup>th</sup> meeting, the Agency suggested that EPA has the authority under Section 308 of the Clean Water Act to require Peabody to characterize its wastewater discharges from Bear Run. While Peabody views this obligation as fully satisfied consistent with IDEM's EPA approved National Pollutant Discharge Elimination System ("NPDES") permitting program, in an effort to provide a productive response to EPA's second request for information, and without conceding any legal arguments or objections regarding the Agency's actions here, Peabody is providing EPA with the proposed Effluent Sampling and Biomonitoring Assessment Plan for Bear Run. As explained more fully below, this Plan is appropriately tailored to respond to EPA's request for data regarding the nature and character of Peabody's permitted discharges at Bear Run.

While Peabody hopes to continue to explore options for productive engagement with EPA with respect to the pending 308 request and will reserve the full force of any legal arguments and defenses for future proceedings should they become necessary, some additional commentary is necessary, in part, as a basis for explaining the scope of Peabody's proposed Effluent Sampling and Biomonitoring Assessment Plan. In sum, Peabody finds the Agency's March 22<sup>nd</sup> 308 request to be unjustified and contrary to law as (i) EPA cannot use its 308 authority to compel monitoring, testing and assessment of the scope and magnitude proposed in the 308 request, (ii) the Agency already has sufficient information to understand both the character of Peabody's wastewater discharges and the nature of impairments in the watersheds, and (iii) the requested work is, in many respects, technically infeasible and otherwise not designed and tailored to assess and measure potential impacts from Peabody's mining operations.

**I. The scope and substance of EPA's March 22<sup>nd</sup> Request for Information**

In January of 2012, Peabody provided extensive documentation to EPA in response to the Agency's original 308 request directed at Bear Run. This documentation included copies of all applicable SMCRA and NPDES permits for the Bear Run operations and voluminous effluent sampling, water quality, and biological monitoring and habitat and stream

<sup>1</sup> Peabody finds the timing of EPA's 308 requests curious, coming as they have after The Environmental Law and Policy Center initiated litigation challenging the issuance of the IDEM NPDES permit for Bear Run.

assessment data generated by or at the direction of Peabody at Bear Run for the past five years, including the following:

- All analytical results, including sampling results generated by any laboratory, for any monitoring of process water and storm water discharges at Bear Run during the past five-years, including ambient and groundwater monitoring for all NPDES and/or SMCRA permits;
- Copies of all Discharge Monitoring Reports (DMRs) submitted to any regulatory agency during the past five-years; and
- Copies of all biological and water chemistry monitoring and/or sampling results during the past five-years.

Notwithstanding Peabody's prior exhaustive response and document submittal, EPA's March 22<sup>nd</sup> 308 request seeks additional information in the Company's possession regarding historical sampling, monitoring and assessment work conducted by Peabody at Bear Run. More problematic, though, the 308 request (specifically, Requests 1 through 6) also asks that Peabody affirmatively conduct wide ranging monitoring, assessments and other studies in waters in and around the Bear Run mine, including portions of the Busseron Creek, Black Creek, Indian Creek, and Maria Creek watersheds. The work requested in the March 22<sup>nd</sup> 308 request includes water quality testing (ambient water quality, whole effluent toxicity ("WET"), and effluent), biological community assessments (fish and macroinvertebrates), and stream physical habitat evaluations of the type and nature documented in the initial 308 submittal. As it has in the past, Peabody is prepared to provide EPA with access to water quality, biological and habitat assessment and effluent discharge data and other relevant information generated at Bear Run and currently in the possession of Peabody. In fact, Peabody is quite confident that EPA currently possesses, or has access to, all such information and data. Nonetheless, Peabody is currently reviewing its files and will provide any additional responsive documents to the Agency consistent with the deadlines set forth in the 308 request. Peabody, however, objects to the request for monitoring, assessment and sampling as contrary to the Agency's authority under Section 308 of the Clean Water Act.

**II. EPA lacks the legal authority to enforce its March 22<sup>nd</sup> 308 request**

EPA's demand to Peabody to proceed with the proposed studies and assessment and monitoring work at Bear Run, as embodied in the 308 request, is without legal justification. Section 308(a) of the Clean Water Act gives EPA the authority to request information of an owner or operator of a point source in order to carry out the objectives of the Act. 33 U.S.C. § 1318(a). EPA's authority under Section 308 is not unlimited, however, and the Agency is required to exercise such authority in a reasonable manner. *U.S. v. Hartz Constr. Co.*, 2000 U.S. Dist. LEXIS 12405, at \*9 (N.D. Ill. Aug. 17, 2000). Historically, and as contemplated by the Act, EPA has used Section 308 to request from regulated entities specific information that is already available or easily compiled. Even when EPA has requested sampling, such

requests typically involve only influent or effluent sampling that is already available or can be readily conducted within the context of a company's regular operations.

No such reasonable scope or appropriately limited compliance efforts can be found in EPA's March 22<sup>nd</sup> 308 request. Instead, the request seeks expansive sampling, evaluation and study across multiple watersheds using protocols that are technically infeasible in many requests and not in any way designed to assess impacts from coal mining operations. Ultimately, Peabody's cost to provide "information" to EPA under this request will run in excess of \$700,000.

Clearly, the scope and cost of what EPA has proposed here is not what Congress intended when it granted EPA this authority to request information from the regulated community under Section 308 of the Clean Water Act and is unprecedented in Agency practice. Even more egregious, though, is the fact that EPA is pursuing this broad request from a company that is in full compliance with its Clean Water Act regulatory requirements, with such compliance being continuously and thoroughly assessed, vetted and addressed by multiple agencies – the Army Corps of Engineers, EPA, the Indiana Department of Natural Resources and IDEM – through numerous regulatory approval processes – SMCRA permit applications, Clean Water Act Section 404 permits, state Clean Water Act 401 certifications, and state NPDES permits. Importantly, extensive sampling and habitat assessments were performed during regulatory proceedings associated with these permits. EPA actively participated in these proceedings and approved the scope of these assessments. Nonetheless, the Agency appears to be suggesting now, through its 308 request, that this prior work is somehow insufficient today. Further, the vast majority of the work requested by EPA at Bear Run is studies, assessments and evaluations that both have already been performed and, in any event, are the responsibility of IDEM to complete as the Indiana Clean Water Act permitting authority.

Wastewater discharges at Bear Run are authorized under the Clean Water Act pursuant to NPDES permit ING040239 issued by IDEM on May 15, 2009, as modified, including most recently on July 15, 2011 (the "Permit"). Peabody is in full compliance with the Permit and has had no violations at Bear Run in the last five years. In its January response to EPA's first 308 request, Peabody provided EPA with data which conclusively demonstrates the impeccable Clean Water Act compliance status of its operations at Bear Run. IDEM has further confirmed Peabody's compliance with its Clean Water Act requirements at Bear Run.

In addition to documented NPDES permit compliance, IDEM has also determined through comprehensive technical review and analysis that mining operations, including Peabody's Bear Run facility, are not contributing to water quality impairments in watersheds in the vicinity of Bear Run. IDEM's 303(d) listing documentation confirms that the constituents of concern identified by EPA at our April 16<sup>th</sup> meeting – total dissolved solids and sulfates – are not identified as impairments in any of the Bear Run watersheds. Instead, a review of IDEM's 303(d) documentation identifies the most prevalent impairment in the four

watersheds around Bear Run as "impaired biotic communities." Specifically with respect to IDEM's development of the Total Maximum Daily Loads ("TMDL") for the Busseron Creek watershed, the TMDL report notes the following: "The current mines in the Busseron Creek watershed are not considered significant sources of the impairments noted in this TMDL, as they are in compliance with the limits of their permits." See Busseron Creek TMDL report January 13, 2012, at 33. The conclusion that the Bear Run mine is not a source of relevant impairments is consistent with the fact that impaired biotic communities are designated 303(d) impairments in over 3,000 stream segments across the State of Indiana, with only a very small percentage of such streams being located in areas with any coal reserves.

The overwhelming prevalence of the identified impairments in Bear Run streams across Indiana suggests that any water quality concerns at Bear Run are associated with other prevailing regional sources and issues of concern and not Peabody's mining operations. IDEM has likewise concluded in its 303(d) and TMDL documentation that such impairments are the result of loading from unregulated, i.e., nonpoint, sources (such as agriculture, septic). Given the nature of the identified impairments, the implementation steps developed by IDEM to address these impairments do not include any recommendations to make changes in permitted sources (including Bear Run) in order to meet the TMDLs. Instead, implementation focuses on other sources; recommended controls include lime application and other projects to address impacts from abandoned mine lands, agriculture best management practices ("BMPs") (vegetated filter strips, nutrient management plans), outreach to septic owners and septic repair and maintenance, ongoing monitoring, and consideration of other BMPs as part of Sullivan County's watershed management plan.

Based on the compliance record of Bear Run under its NPDES Permit and on IDEM's evaluation of the causes of impairments in the relevant watersheds, as well as the long history of comprehensive water quality and stream and habitat assessments completed over the last number of years in connection with Bear Run permitting, it is clear that Bear Run is in full compliance with its Clean Water Act obligations and is not contributing to identified water quality impairments. Accordingly, EPA has not provided any legitimate basis for additional assessment and monitoring, let alone the excessive work proposed in its 308 request. As such, EPA's demand for extensive studies here is patently unreasonable and contrary to law.

**III. EPA's March 22<sup>nd</sup> request is duplicative and unnecessary in light of the availability of existing information sufficient for EPA to fulfill its objectives under the Clean Water Act**

The studies requested by EPA in the March 22<sup>nd</sup> 308 request are unnecessary and, therefore, unreasonable, given the extensive data that is already available regarding compliant discharges from, and water quality associated with, Peabody's Bear Run operations. As previously stated, Peabody has already provided EPA with all relevant data in its possession

regarding wastewater discharges and the multitude of stream, habitat and water quality assessments that have been completed at Bear Run. Additionally, in connection with ongoing technical discussions with EPA regarding this request, Peabody has also provided the Agency with additional data regarding the analysis of pollutant discharges and other Clean Water Act assessments conducted at other Peabody mines in the region. Moreover, to the extent that the studies are focused on areas within the purview of IDEM, the type of data that EPA is seeking is already routinely generated by IDEM and readily available to EPA through the State of Indiana.

Taken together, the data, reports, study results and other documentation referenced below provide ample support for EPA to conclude both that Bear Run operations are in compliance with Clean Water Act requirements and otherwise not contributing to water quality concerns, and that the sampling, analysis and assessment work requested by EPA in the 308 request is unnecessary, overbroad and not likely to yield any useful information on potential Clean Water Act concerns associated with mining operations at Bear Run. In fact, as noted below, EPA's 308 request is yet another attempt by the Agency to compel Peabody to repeat the broad study of potential impacts from coal mining operations that was conducted at Vermillion Grove. Given the plethora of data available, it is arbitrary and capricious for EPA to demand that Peabody conduct the requested studies.

In addition to ongoing NPDES discharge effluent monitoring and reporting, Peabody conducts ambient water quality sampling as part of the SMCRA permitting process and continues to monitor SMCRA related water quality at Bear Run on a quarterly basis. Peabody also regularly monitors receiving waters as required pursuant to Bear Run Section 404 permits. Data from each of these sampling programs was submitted to EPA as part of the original 308 response documentation.

Further, Peabody also took samples voluntarily at Bear Run specifically in response to EPA comments during the proceedings associated with Peabody's Bear Run Amendment #4 Section 404 permit application to analyze for additional pollutants, including trace elements and inorganics. This data has already been provided to EPA and found that water quality standards are being met at the mine. Peabody also conducted 14 fish and 53 macroinvertebrate surveys and 2,344 stream habitat assessments as part of its Section 404 work at Bear Run. Likewise, all of this data was provided to EPA in response to the first 308 request.

In the last several weeks during additional technical discussions with EPA over the scope of the latest 308 request, Peabody also provided EPA with the results of a study conducted at Peabody's former Vermillion Grove mine to assess the presence of toxic constituents in Illinois Basin mine wastewater discharges. The express purpose of this study, conducted over an extended period of time and at great expense with the active participation of both EPA and Illinois EPA, was to determine what chemical constituents of concern are associated with mining operations and effluent discharges from such operations. The

Vermillion Grove site was determined to be an ideal location for such a study given the presence of a large above ground refuse disposal area and underground pumpage, both of which contributed to higher dissolved solids loadings to sediment basins, thus reflecting a "worst case" scenario for Illinois Basin coal mining. Multiple year results from the Vermillion Grove study indicated no violations of water quality standards (as was predicted by EPA's initial study and analysis of the indicator NPDES effluent parameters still used pursuant to EPA's federal effluent guidelines for coal mining (40 CFR Part 434)) with constituents beyond those now being monitored under Peabody's NPDES permit at Bear Run. EPA's Region 5 office participated in this exhaustive sampling effort, including sending staff to the mine. Illinois EPA uses the results from the Vermillion Grove testing today to set NPDES permit analyses at mining sites. It should also be noted that WET testing was initially considered for inclusion in the Vermillion Grove sampling plan; however, the regulatory agencies ultimately agreed it was inappropriate and not required. This data overwhelmingly establishes that the scope of pollutant sampling and assessment proposed in the March 22<sup>nd</sup> 308 request is without technical justification and inappropriately broad.

Further, the appropriateness of current data and testing requirements at Bear Run is affirmed by recent EPA sampling and results of assessments conducted at other Peabody mines. Specifically, last September, EPA conducted an unannounced inspection at Peabody's Somerville mine for the purpose of collecting additional water quality data associated with Peabody's regional mining operations. During that inspection, EPA collected numerous samples at all sediment basins following an approximate 4 inch rainfall event. These samples were tested for trace elements and inorganics. While Peabody has not as yet been provided with copies of the Agency's data as promised, Peabody's split samples indicated no concerns with the data. EPA inspectors have also verbally reported that the Agency's results were satisfactory and confirmed the absence of permitted discharge or water quality issues associated with the mine.

Further documentation to support EPA's conclusions at Peabody's Somerville mine can be found in studies conducted at Peabody's Farmersburg mine located south of Terre Haute, Indiana. The Farmersburg mine was the largest surface mine in Indiana for most of the 15 years it was in operation. This mine was closed at the end of 2010 and operated in the same Busseron Creek watershed as Bear Run. In fact, the Farmersburg mine disturbed more surface acres per year than Bear Run is expected to disturb at current production rates. During our April 16<sup>th</sup> meeting with EPA, Agency personnel argued that large mining operations conducted over an extended period of time must be contributing higher concentrations of contaminants to receiving waters. However, studies conducted at the Farmersburg mine have demonstrated that waters associated with reclaimed surface coal mines support aquatic ecosystems comparable to, or better than, those representative of the pre-mined area. EPA has reviewed this data from Farmersburg and previously concluded that no Clean Water Act problems or concerns exist with respect to the Farmersburg operations. Peabody is unaware of any data supporting increased contaminant loading or

impacts due to mine size or length of operating life and has not seen any such trend at the Company's own mines.

Another study prepared by Environ International Corporation at the request of Peabody (January 2011) documents the successful reconstruction of stream ecosystems at a large surface mine in southern Illinois where mining and reclamation had been completed during the 1980s and early 1990s. Mining and reclamation processes in the Illinois Basin have improved since this successful restoration was completed. Peabody has commissioned similar studies at the former Farmersburg mine as well. EPA was previously provided with copies of these studies as well.

Additional studies and reports were recently provided to EPA personnel during ongoing technical discussions in furtherance of resolution of issues associated with this 308 request. These documents respond to and refute the Agency's contentions regarding the apparent assumed impacts associated with significant mining operations. These reports are referenced below and provided again at Appendix B hereto.

- Impacts of Coalmine Discharges on Illinois Unionid Mussels, by David J. Soucek, Center for Ecological Entomology, Illinois Natural History Survey (2004)
- Black Beauty Coal Vermillion Grove Mine Surface Water Quality Analysis, Prepared by Peabody Energy (November 2010)
- Report for Fish and Macroinvertebrate Sampling for Bioassessment Monitoring of West Busseron Creek, Prepared by Environ International Corporation (September 2010)
- The Biological Status in Bonnie Creek, Galum Creek, and White Walnut Creek Following Stream Diversion and Reconstruction, Prepared by Environ International Corporation (January 2011)
- Freshwater Mussel Survey Results, West Fork Busseron Creek Mitigation Area (Farmersburg), prepared by Environ International Corporation (August 2011)

In sum, exhaustive sampling at Bear Run, studies at other mines, and IDEM's sampling in the watersheds relevant to Bear Run all provide more than sufficient data for EPA's consideration in fulfilling its objectives under the Clean Water Act. Despite repeated requests from Peabody to EPA to provide relevant information on water quality concerns at Bear Run and despite Agency statements to the press regarding the apparent presence of water quality impacts associated with Peabody operations at Bear Run (i.e., Indianapolis Star article), EPA has yet to provide any documents, studies, reports or other information to support its allegations. As documented in this letter, Peabody has provided the Agency with a long list of comprehensive studies and reports establishing the absence of impacts and concerns and

the corresponding baseless nature of the pending 308 request. As stated, Peabody is also reviewing its files again and, to the extent not already provided, will produce additional documentation responsive to the March 22<sup>nd</sup> request consistent with the direction and timing requested by the Agency.

#### IV. EPA's Information Request is inappropriate

The breadth and technical substance of EPA's March 22<sup>nd</sup> request also finds no support in law. Most of the requested assessment and monitoring falls squarely within the purview of IDEM as the permitting authority for implementation of the Clean Water Act in the State of Indiana, including conducting Section 305(b) water quality assessments and listing impaired waters and developing total maximum daily loads under Section 303(d), and are not the responsibility of Peabody to perform as a regulated entity. The requested sampling also seeks to compel Peabody to analyze for wide ranging chemical constituents that have been determined by decades of sampling and regulatory proceedings, as well as Peabody's own data, to be wholly inapplicable to coal mining operations in the Illinois Basin. EPA has also requested assessment and testing that is technically infeasible to perform given the hydrology of the Bear Run environment.

At its core, the breadth of EPA's 308 request appears motivated by the Agency's desire to generate data to any kind and nature to support its arguments with IDEM over the technical sufficiency of the State's general permit program for mining operations and the application of that permit program to Bear Run. Obviously, EPA's use of its 308 authority in this manner and for these reasons is entirely inappropriate. Moreover, the actual substance of the requests for sampling and analysis – requesting as they do unlimited chemical constituent screening and unnecessary and duplicative assessment work - offends any sense of regulatory logic as IDEM's general permit program is based on EPA's long established and recently reaffirmed federal effluent guidelines for coal mining, was approved by the Agency, and has been determined to be protective of human health and the environment through decades of sampling and analysis at coal mines operating throughout the State.

Ambient Water Quality Sampling: EPA has requested extensive ambient water quality sampling at Bear Run in the 308 request. Such sampling is within the exclusive purview of IDEM, which assesses water bodies to evaluate attainment of state water quality standards for the biennial 303(d) listing and to determine TMDLs for impaired water bodies. IDEM has evaluated impairments and potential sources for many of the segments in the relevant watersheds and continues that effort as part of its 305(b) assessment and 303(d) listing processes. It is inappropriate for EPA to request evaluations of water quality and impairments outside the context of the long established statutory process for doing so.

EPA's request also seeks to compel Peabody to analyze water quality for a very broad list of parameters – 20 constituents, including cations, anions, and metals. For the Busseron Creek watershed, IDEM has already determined the parameters that need to be managed through

TMDLs in order to address the impairment for impaired biotic communities that is present in these regional waters – TSS, iron, phosphorus, dissolved oxygen, pH, copper, and zinc. More narrowly, pH, TSS and iron are the only parameters relevant to the portions of the watersheds where Bear Run is located. Rather than focus on the impairments that have been identified in the relevant watersheds, EPA has proposed a study of ambient water quality that disregards the work already done by IDEM and includes a host of parameters that have no relevance at all to coal mining operations.

Further, Peabody has serious technical objections to the locations proposed for ambient water quality sampling as provided in the 308 request. The suggested locations for such sampling are not properly placed to elicit true measurements of watershed water quality.

*WET Testing:* WET testing is used to determine compliance with WET limits in an NPDES permit. WET limits are only included in an NPDES permit if the permit writer determines that the discharge causes or has the reasonable potential (“RP”) to cause or contribute to non-attainment of a WET water quality standard. WET limits are not necessary in an NPDES permit if the permit writer determines that the chemical-specific limits in the permit are sufficient to attain applicable WET water quality standards. Thus, the function of WET testing is to determine compliance with an NPDES permit that includes a WET limit as a permit term. Absent an RP determination, there is no justification to suggest that the Bear Run NPDES permit should include WET limits or that any WET testing is justified. Further, it is inappropriate as a regulatory matter to simply require WET testing outside the context of an NPDES permit term requiring WET testing.

Moreover, EPA and state agencies have determined as a general matter that WET limits and testing are not appropriate for discharges from typical Midwest mining operations, such as Bear Run, given the flow limitations and characteristics of the relevant streams, and other technical factors. For example, EPA initially proposed WET testing for Peabody’s former Vermillion Grove mine, but later withdrew the request after further consideration and dialogue by and among Illinois EPA and EPA. This determination regarding the inappropriateness of WET testing to Midwest mine sites was based on the recognition that WET testing is not accurate in the context of mining operations and the streams that are typically present at these operations. Consistent with conditions at mine sites within the Illinois Basin, applicable stream segments at Bear Run are primarily ephemeral or intermittent, thus making WET testing infeasible. Enclosed at Appendix C is a technical memorandum comprehensively discussing the scientific and technical bases for the conclusion that WET testing is inappropriate at Bear Run.

*Effluent Sampling:* As with the ambient water quality sampling, EPA is seeking to analyze effluent for a very broad list of parameters – 20 constituents, including cations, anions, and metals. If EPA’s focus is on impairments in the relevant watersheds, then any sampling should be focused on specific parameters relevant to such identified impairments. For the relevant watersheds associated with Bear Run, IDEM has already determined the parameters

that need to be managed through TMDLs in order to address the impairment for impaired biotic communities – TSS, iron, phosphorus, dissolved oxygen, pH, copper, and zinc. More narrowly, TSS and iron are the only parameters relevant to the portion of watersheds where Bear Run is located. Accordingly, EPA's insistence that Peabody conduct sampling that goes well beyond an analysis of applicable parameters is entirely inappropriate.

The broad nature of the requested effluent sampling is also underscored by comparing EPA's proposed sampling protocol against federal and state NPDES permit limits and regulations for mining operations. The IDEM General NPDES Permit regulations for coal mining provide limits for TSS, pH, iron, as well as manganese for acid mine drainage, and also requires reporting of (but no limits for) aluminum, copper, zinc, and nickel for acid mine drainage. According to the Busseron Creek TMDL report, the limits are based on federal effluent guidelines for coal mining (40 CFR Part 434), which only include limits for iron, manganese, total suspended solids, and pH. A more appropriate effluent sampling plan would focus on the parameters that are typical relevant to mining operations as opposed to the limitless parameters proposed in the 308 request.

*Biological and Habitat Assessment:* As stated previously, extensive biological assessments of fish and macroinvertebrates and stream physical habitat evaluations have already been completed at Bear Run. Specifically, 14 fish, 53 macroinvertebrate, and 2,344 stream physical habitat evaluations were conducted for the Amendment #4 and #5 permit areas at Bear Run. Stream sampling locations were selected to reflect the expected biological attributes of the surrounding streams in the geographic region and to be representative of each land use type and watershed in the proposed permit area. Land use consists predominately of row crop agriculture with mosaic forested areas along stream corridors and wetlands and reclaimed mine surfaces. Perennial, intermittent, and ephemeral flow regimes were also sampled to further elucidate the representative biological communities and level of biological integrity in the area. Results of the macroinvertebrate index of biotic integrity (mIBI) and fish index of biotic integrity (fIBI) indicated the streams were impaired. Physical habitat evaluations, following the EPA RBP II physical habitat assessment for low gradient streams, also found the streams to be marginal to sub-optimal. Stressors observed across the county were nitrogen, phosphorous, increased streambed sediments, and riparian disturbance (EPA's Wadeable Stream Assessment Survey, 2006) and identified impairments were attributable to the common industrialized row crop agriculture in the area.

These comprehensive biological and habitat assessments and evaluations have yielded detailed information on appropriate conditions within Bear Run watersheds and are sufficient to allow EPA to complete any relevant assessments regarding compliance with Clean Water Act requirements. These assessments were completed primarily in the Amendment #4 and #5 areas at Bear Run due to changing regulatory requirements, but are applicable across the watersheds. To compel Peabody to proceed with additional biological assessment work here – a task, incidentally, never required of an NPDES permittee - would necessarily mandate the retention of third party environmental consultants with the required

expertise to complete these highly technical reviews. The time and expense of such an undertaking to confirm the consistency of current conditions with prior technical conclusions is unwarranted and inappropriate. Nevertheless, Peabody is proposing in the Effluent Sampling and Biomonitoring Assessment Plan to complete two additional biomonitoring assessments downstream of sediment basins 03R and 062, since previous assessments did not include these areas.

#### V. Peabody's proposed Effluent Sampling and Biomonitoring Assessment Plan

Notwithstanding Peabody's stated objections to the March 22<sup>nd</sup> 308 request, Peabody is proposing an alternative Effluent Sampling and Biomonitoring Assessment Plan (Appendix A) in an effort to respond in a productive way to EPA's desire for additional assessment work at Bear Run. The proposed Plan has been developed consistent with the ongoing technical discussions between EPA and Peabody with respect to this matter and specifically to respond to EPA's stated objectives here – to provide EPA with information on the character of Peabody's wastewater discharges at Bear Run. The proposed Plan was also developed with specific reference to EPA's apparent position that no additional work will be requested under Section 308 if IDEM mandates Peabody to obtain an Individual NPDES permit for Bear Run.

In light of this understanding, the proposed assessment work is intended to address those discharges and those chemical constituents demonstrated to be relevant and appropriate for assessment and evaluation based on the nature of Peabody's operations and the conditions encountered at Bear Run. The proposed list of parameters in the Plan goes beyond what is required to be assessed under Indiana's General Permit program and includes relevant constituents typically analyzed under Illinois EPA's Individual Permit program, which has been approved and affirmed by EPA. Peabody is confident that implementation of this Effluent Sampling and Biomonitoring Assessment Plan will yield results consistent with the decades of data generated by EPA, IDEM and Peabody on Bear Run water quality and Peabody mining operations in the Illinois Basin.<sup>2</sup>

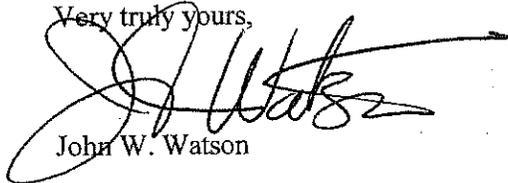
Peabody is prepared to engage with EPA on the substance of the proposed Effluent Sampling and Biomonitoring Assessment Plan and any outstanding questions the Agency may have regarding the scope and extent of the assessment work proposed in the Plan. Peabody is also committed to pursue implementation of the proposed Plan consistent with a mutually agreeable timetable to ensure fulfillment of EPA's objectives here. Of course, as

<sup>2</sup> Information specific to sediment basins and impoundments that are associated with process water management was provided in Peabody's response to the original 308 request letter. Note that a revised Coal Processing Plant Circuit Map 4I is provided in this submittal showing: 1) outfall 041N will be dropped and all drainage from SB041 will discharge through NPDES outfall 061 and 2) the corrected location of outfall 061. As requested, additional design information relevant to the sediment basins/outfalls included in the proposed Effluent Sampling and Biomonitoring Assessment Plan is included in Appendix D of this submittal.

stated herein, this Plan is being proposed without prejudice to any legal rights and defenses Peabody may wish to assert in subsequent legal proceedings in connection with this matter and nothing herein shall be construed as an admission or waiver of any facts, legal arguments or defenses Peabody may have here.

We look forward to your response to the proposed Effluent Sampling and Biomonitoring Assessment Plan.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Watson", written over the typed name "John W. Watson". The signature is stylized and cursive.

John W. Watson

Enclosures



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June 28, 2012

Ms. Kasey Barton  
 U.S. Environmental Protection Agency  
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John W. Watson  
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 John.Watson@bakermckenzie.com

Via Email

RE: Peabody Midwest Mining, LLC – Bear Run Mine, Indiana  
 March 22, 2012 Clean Water Act Section 308 Request  
 Docket No. V-W-12-308-09

Dear Kasey:

Consistent with our discussions, enclosed you will find a revised Effluent Sampling Plan for Peabody Midwest Mining, LLC's ("PMM") Bear Run Mine submitted in response to U.S. EPA's Clean Water Act Section 308 Request for Information. As we have discussed, the revised Plan incorporates the Agency's request for additional effluent sampling of certain cations and anions and additional metals (aluminum and vanadium).

As documented in my letter of May 23, 2012 and subsequent email correspondence of June 7, 2012, U.S. EPA cannot support the breadth of the sampling requested of PMM and now incorporated in the PMM Plan. While I do not intend to repeat PMM's well documented legal and technical position on these issues, it is sufficient to restate that none of the requested additional sampling at issue in our recent discussions bears any relationship to the Agency's authority under the Clean Water Act, as expressly delegated to the Indiana Department of Environmental Management ("IDEM"), to regulate effluent discharges to ensure the attainment of established water quality standards. We understand that PMM's views on the Section 308 Request are shared by IDEM which, in Bruno Pigott's June 15, 2012 letter to Tinka Hyde, characterizes the Agency's actions here as, among other things, "overreaching" and "impractical, inefficient and unreasonable."

To be clear, PMM is unconcerned by the ultimate results of the data that will be generated through the Agency's mandated sampling. PMM has been through this exercise before and has reams of historical data on the nature and character of discharges associated with its operations. As you know, much of this information, including the results of extensive sampling and monitoring at Bear Run, was previously provided to U.S. EPA last Fall in response to your first Section 308 request for information. What PMM is very concerned about, however, is how U.S. EPA intends to use this data and whether it will be subjected to mischaracterization and distortion as a means to advance some ill-conceived Agency objective. One need look no further than the Agency's prior erroneous statements to the Indianapolis Star regarding water quality at Bear Run to justify PMM's skepticism here.

U.S. EPA's insistence on including aluminum in the parameters for effluent sampling under the Plan highlights well the nature of PMM's concerns. In the first instance, the Agency's request for aluminum sampling in the absence of established water quality standards in Indiana is fundamentally at odds with the intent, structure and application of the Clean Water Act both in Indiana and around the country. By mandating aluminum sampling at Bear Run, U.S. EPA has now achieved the wholly illogical result of requiring sampling for effluent discharges at Bear Run notwithstanding the fact that Alcoa operates an aluminum production plant in Newburgh, Warrick County, Indiana that has no effluent limits for aluminum.

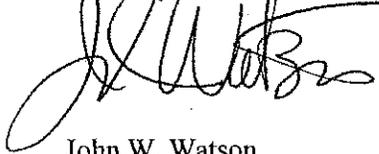
Moreover, the Agency's defense of its request for aluminum sampling cites apparent concerns with possible exceedances of U.S. EPA established freshwater aquatic health criterion from 1988. There is little doubt that aluminum concentrations at Bear Run will likely exceed the Agency's 1988 guidance. Aluminum correlates well with total suspended solids and is found in effluent across southern Indiana's agricultural landscape – consistently at higher concentrations in areas uninfluenced by coal mining operations. At the same time, EPA's 1988 aluminum criterion has been established by both the scientific and regulatory community as being outdated and not reflective of existing science on aluminum toxicity in the aquatic environment.<sup>1</sup> The attached memorandum and supporting documentation from GEI Consultants explains the inherent, recognized flaws in the 1988 guidance and the technical basis for revised aluminum standards that have superseded the 1988 guidance and have been relied upon in numerous states in the implementation of their NPDES permit programs (with the approval of U.S. EPA).

It is unclear how U.S. EPA intends to utilize the result of the aluminum effluent sampling completed by PMM at the Bear Run Mine. To the extent the Agency is suggesting its 1988 guidance on aluminum is relevant to an analysis of water quality concerns, such a position is misplaced and contrary to established science and regulation. Similar regulatory limitations exist with respect to the use and reliance on cations and anions results, hence PMM's concerns over the potential mischaracterization and misuse of collected data that motivated our initial objections to this element of the proposed Effluent Sampling Plan.

<sup>1</sup> It is well understood that hardness plays a significant role in the toxicity of metals, including aluminum, and other effluent constituents. The existing aluminum criteria in U.S. EPA's 1988 guidance and other past studies and models, including the Mount STR Model, fail to properly account for hardness impacts and do not reflect current science. As such, they have no relevance for use by the Agency in any water quality assessments.

PMM expects that the results from the implementation of the agreed upon Effluent Sampling Plan will be the subject of discussion and dialogue among PMM and the Agency. By pointing out our issues and objections now, PMM hopes to avoid the stated concerns over the interpretation, regulatory significance and ultimate use of such data and information. By proceeding with the implementation of the proposed Plan, Peabody is making no admissions regarding the authority of U.S. EPA to request such sampling under Section 308 of the Clean Water Act and expressly reserves all rights and defenses, including its right to cease sampling at any time. Please call me should you have any questions regarding the attached Effluent Sampling Plan.

Sincerely,



John W. Watson

JWW/ac  
Enclosure

cc: Mary Frontezak (w/encl.)

CHIDMS1/3049602.1

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**APPENDIX A**

**June 28, 2012**



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## Appendix A

### EFFLUENT SAMPLING/BIOMONITORING ASSESSMENT PLAN

Pursuant to the Clean Water Act Section 308 Request for Information, dated March 22, 2012, Peabody Midwest Mining, LLC ("Peabody") has developed this Effluent Sampling/Biomonitoring Assessment Plan (the "Plan") for further monitoring, assessments and other studies in waters in and around the Bear Run Mine, including portions of the Busseron Creek, Black Creek, Indian Creek, and Maria Creek watersheds. As set forth herein, Peabody is proposing to conduct comprehensive effluent sampling of wastewater discharges from the Bear Run Mine, including sampling and analysis of chemical constituents far beyond the indicator effluent limits included in Peabody's NPDES permit and otherwise intended and promulgated under 40 CFR Part 434 and Indiana's Coal Mining NPDES permit requirements. Peabody is also proposing to complete additional biological assessment work to supplement the 14 fish, 53 macroinvertebrates and 2,344 stream physical habitat evaluations already conducted at Bear Run.

#### 1. Effluent Sampling

##### Sample Locations

Peabody's Bear Run Mine proposes to sample a total of six outfalls reporting to the four watersheds (Black Creek, Busseron Creek, Indian Creek, and Maria Creek) that receive discharge from Bear Run Mine. Representative outfalls were selected based on two criteria: (1) the outfall's receiving watershed and (2) the type of mining related source water (drainage or pumpage) received, as established by the EPA 308 Information Request priority system. Mine drainage status (alkaline or undetermined) was not incorporated into the outfall criteria based on preliminary sampling results that indicate all previously undetermined outfalls are alkaline (a Notice of Intent has been submitted to IDEM to that effect for the remaining unclassified outfalls). The mining related source water priority designations are as follows:

- **Coal Refuse:** areas where fine coal refuse is exposed to storm water. Coarse coal refuse is returned to near the bottom of the active pit and covered by spoil. Fine coal refuse is sent to a slurry basin.
- **Coal Storage:** areas near the preparation plant that include raw coal storage, product coal, and coarse and fine refuse handling facilities.
- **Active Mining:** areas where topsoil, subsoil, and overburden have been removed. These include locations where soil stockpiles have been or are being established, and where soil stockpiles and overburden is exposed to storm water events.
- **Reclamation:** areas where spoil, subsoil, and topsoil have been replaced and vegetation has been established.

The selection process includes at least one representative outfall for each of the four watersheds receiving drainage from the Bear Run Mine affected area. One outfall was selected for each of the Indian Creek and Maria Creek Watersheds (053 and 058, respectively). Two outfalls were selected for the Black Creek watershed (18R reports to an unnamed tributary to Black Creek and 062 reports to Spencer Creek). Two outfalls were also selected for the Busseron Creek Watershed (03R reports to Buttermilk Creek and 044 reports to Middle Fork Creek). None of the active outfalls at the Bear Run Mine receive source water from coal refuse (Priority 1); Outfalls 044 and 062 receive source water from coal storage and coal preparation plant areas (Priority 2); Outfalls 18R, 053 and 058 receive surface water drainage from active mine areas (Priority 3); and Outfall 03R receives surface water drainage from reclamation areas (Priority 4). Sample locations are shown on Exhibit I (Map 4E1). The watershed, receiving stream, and source water/priority classification for each outfall are found below in Table 1.

Watershed/ Receiving Stream	Permit #	Priority 1. Coal refuse pile	Priority 2. Coal preparation plant & associated areas (includes refuse disposal areas.)	Priority 3. Controlled surface mine drainage areas	Priority 4. Reclamation areas
Busseron Creek / Buttermilk Creek	S-256	NA			03R
Busseron Creek / Middle Fork Creek	S-256-1	NA	044		
Black Creek / Unnamed Tributary	S-256-1	NA		18R	
Black Creek / Spencer Creek	S-256-2	NA	062		
Indian Creek / Pollard Ditch	S-256-4	NA		053	
Maria Creek / Unnamed Tributary	S-256-4	NA		058	

**Table 1.** Sample Locations Based on EPA Priority System

### Sample Requirements

Effluent samples will be collected from each of the above listed outfalls twice a month for a total of four months. Sample collection will be dependent on the discharge condition, with one sample collected under base flow conditions and the other sample collected under precipitation conditions. Effluent samples will be analyzed for the following analytes per discussion with EPA:

1. Cations: calcium, magnesium, sodium and potassium
2. Anions: chloride, sulfate and bicarbonate

3. Metals (total and dissolved): aluminum, cadmium, chromium, iron, manganese, mercury\*, selenium\*, vanadium, zinc, antimony, arsenic, beryllium, copper, lead, nickel, silver and thallium (\* low level method)
4. Additional sampling parameters: pH (field), total dissolved solids (lab), specific conductance (lab), acidity, alkalinity, hardness and total suspended solids

Analytes include selected cations, anions, total and dissolved metals and additional parameters that will reflect any and all changes in water chemistry associated with mining activities. Samples will be collected by experienced personnel using standard industry practices. All samples will be collected using grab sample techniques, as agreed upon in technical discussions with Janet Pellegrini. Samples will be collected into polyethylene containers, preservatives will be added when required, and the samples will be placed in a cooler for transportation to the lab as required. Samples will be delivered to either McCoy & McCoy Laboratories, Inc. in Madisonville, Kentucky; SGS Mineral Services laboratory in Henderson, Kentucky; Environmental Certification Labs, Inc. in Farmersburg, Indiana or other accredited laboratories as necessary.

#### **Quality Assurance/Quality Control Measures**

QA/QC samples will be collected in accordance with IDEM protocols, as described in IDEM's Field Surveys Section Field Procedure Manual (2002). Specifically, a field duplicate will be collected at a rate of one duplicate for every 10 samples. A field blank will be collected as one blank for every 20 samples collected, or at a minimum one blank for every sampling event. Field documentation will include sample collection records, quality control records, and general field procedures. Laboratory documentation will include chain-of-custody forms, sample shipment information and management records, test methods, and laboratory data sheets.

## **2. Biological Assessment**

Biological monitoring and sampling will be conducted downstream of outfalls 03R, 18R and 062 (Map 4E1). One sample will be collected at each location during the period of effluent sampling. Biological evaluation methods will include macroinvertebrate and fish sampling as well as stream physical habitat evaluation. Macroinvertebrate monitoring will follow the modified EPA Benthic Macroinvertebrate Protocol designed by IDEM and detailed in Multi-Habitat Macroinvertebrate Collection Procedure. Fish sampling will follow the EPA fish sampling protocol modified by IDEM in Summary of Protocols: Probability Based Site Assessment. Stream physical habitat evaluation will follow the EPA RBP II physical habitat evaluation method outlined by the EPA. Aquatic assemblages will be analyzed using the IDEM Biological Studies Section mIBI and fIBI scores. Bench notes and photographic evidence for each sample location will be submitted with the report.

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**APPENDIX A – EXHIBIT 1**

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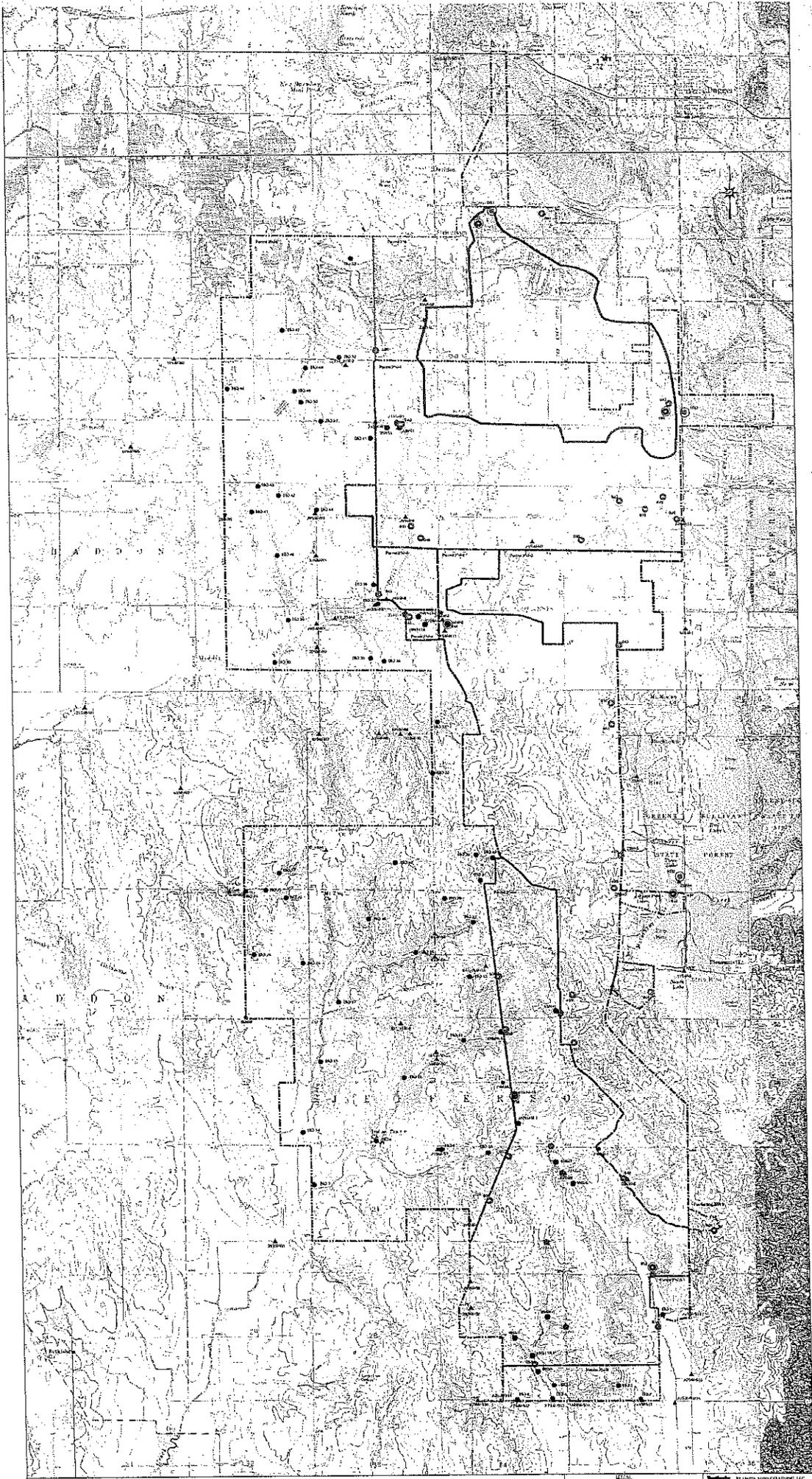
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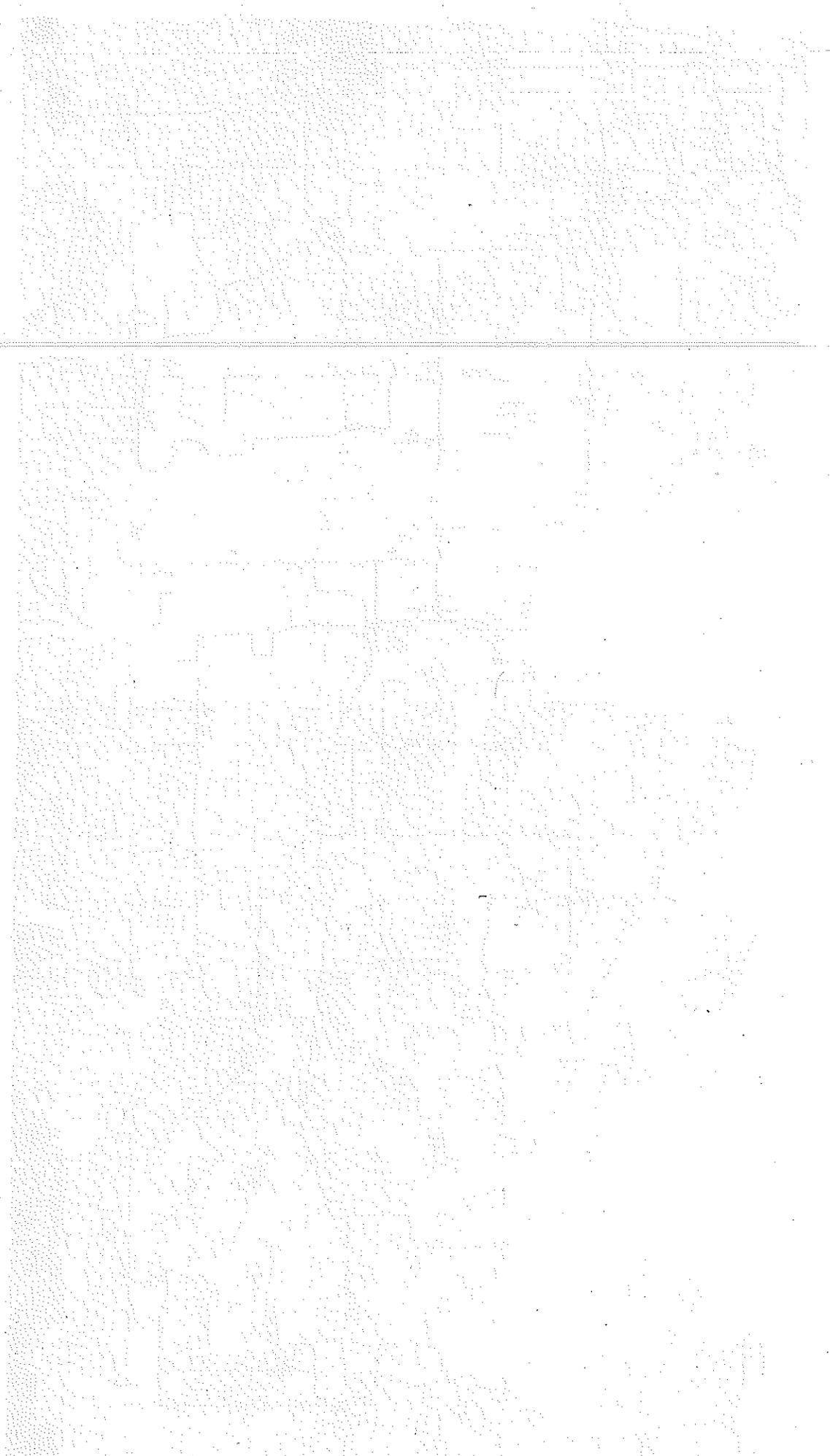
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APPENDIX A

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**APPENDIX A**

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## Appendix A

### EFFLUENT SAMPLING/BIOMONITORING ASSESSMENT PLAN

Pursuant to the Clean Water Act Section 308 Request for Information, dated March 22, 2012, Peabody Midwest Mining, LLC ("Peabody") has developed this Effluent Sampling/Biomonitoring Assessment Plan (the "Plan") for further monitoring, assessments and other studies in waters in and around the Bear Run Mine, including portions of the Busseron Creek, Black Creek, Indian Creek, and Maria Creek watersheds. As set forth herein, Peabody is proposing to conduct comprehensive effluent sampling of wastewater discharges from the Bear Run Mine, including sampling and analysis of chemical constituents far beyond the indicator effluent limits included in Peabody's NPDES permit and otherwise intended and promulgated under 40 CFR Part 434 and Indiana's Coal Mining NPDES permit requirements. Peabody is also proposing to complete additional biological assessment work to supplement the 14 fish, 53 macroinvertebrates, and 2,344 stream physical habitat evaluations already conducted at Bear Run.

#### 1. Effluent Sampling

##### Sample Locations

Peabody's Bear Run Mine proposes to sample a total of five outfalls reporting to the four watersheds (Black Creek, Busseron Creek, Indian Creek, and Maria Creek) that receive discharge from Bear Run Mine. Representative outfalls were selected based on two criteria: (1) the outfalls receiving watershed and (2) the type of mining related source water (drainage or pumpage) received, as established by the EPA 308 Information Request priority system. Mine drainage status (alkaline or undetermined) was not incorporated into the outfall criteria based on preliminary sampling results that indicate all previously undetermined outfalls are alkaline (a Notice of Intent has been submitted to IDEM to that effect for the remaining unclassified outfalls). The mining related source water priority designations are as follows:

- **Coal Refuse:** areas where fine coal refuse is exposed to stormwater. Coarse coal refuse is returned to near the bottom of the active pit and covered by spoil. Fine coal refuse is sent to a slurry basin.
- **Coal Storage:** areas near the preparation plant that include raw coal storage, product coal, and coarse and fine refuse handling facilities.
- **Active Mining:** areas where topsoil, subsoil, and overburden have been removed. These include locations where soil stockpiles have been or are being established, and where soil stockpiles and overburden is exposed to stormwater events.
- **Reclamation:** areas where spoil, subsoil, and topsoil have been replaced and vegetation has been established.

The selection process includes at least one representative outfall for each of the four watersheds receiving drainage from the Bear Run Mine affected area. Only one active outfall is present in the Black Creek, Indian Creek, and Maria Creek Watersheds, 062, 053, and 058 respectively. Two outfalls were selected

for the Busseron Creek Watershed, outfall 03R reports to Buttermilk Creek and 044 reports to Middle Fork Creek. None of the active outfalls at the Bear Run Mine receive source water from coal refuse (Priority 1). Outfalls 044 and 062 receive source water from coal storage and coal preparation plant areas (Priority 2); Outfalls 053 and 058 receive surface water drainage from active mine areas (Priority 3); and Outfall 03R receives surface water drainage from reclamation areas (Priority 4). Sample locations are shown on revised Map 4E1. The watershed, receiving stream, and source water/priority classification for each outfall is found in Table 1.

Watershed/ Receiving Stream	Permit #	Priority 1. Coal refuse pile	Priority 2. Coal preparation plant & associated areas (includes refuse disposal areas.)	Priority 3. Controlled surface mine drainage areas	Priority 4. Reclamation areas
Busseron Creek / Buttermilk Creek	S-256	NA			03R
Busseron Creek / Middle Fork Creek	S-256-1	NA	044		
Black Creek / Spencer Creek	S-256-2	NA	062		
Indian Creek / Pollard Ditch	S-256-4	NA		053	
Maria Creek / Unnamed Tributary	S-256-4	NA		058	

**Table 1.** Sample Locations Based on EPA Priority System

### Sample Requirements

Effluent samples will be collected from each of the above listed outfalls twice a month for a total of four months. Sample collection will be dependent on the discharge condition, with one sample collected under base flow conditions and the other sample collected under precipitation conditions. Effluent samples will be analyzed for the following analytes which are those required on the Federal NPDES Part 5-C of Form 2C, 1M-13M metals (1.) plus general water quality indicator parameters (2.).

1. Metals: antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc.
2. Additional sampling parameters: acidity, alkalinity, chloride, hardness, pH, sulfate, total suspended solids, and total dissolved solids.

Selected analytes include total metals and additional analytes that will reflect any and all changes in water chemistry associated with mining activities. Discussions with the Illinois EPA indicate that EPA Region 5 is satisfied with NPDES related water sampling and analyses at Illinois coal mines and it should be noted that the proposed list of constituents includes those required by Illinois EPA for predischARGE background water quality, as required by special condition of the Illinois NPDES permit. Mercury analysis will follow EPA sampling Method 1669 and analytical Method 1631 SE. Samples will be collected by experienced personnel using standard industry practices. All samples will be collected using grab sample techniques, as agreed upon in technical discussions with EPA. Sampling procedures will include facing upstream (i.e. standing downstream) during sample collection and dipping the sample bottle into the stream without touching the stream bottom. Samples will be collected into polyethylene containers, preservatives will be added when required, and the samples will be placed in a cooler for transportation to the lab as required. Samples will be delivered to McCoy & McCoy (McCoy & McCoy) Laboratories, Inc. located in Madisonville, Kentucky. McCoy & McCoy is a National Environmental Laboratory Program (NELAP) accredited laboratory and certifies that all applicable test results meet the requirements of NELAP. Other accredited laboratories may be used as necessary.

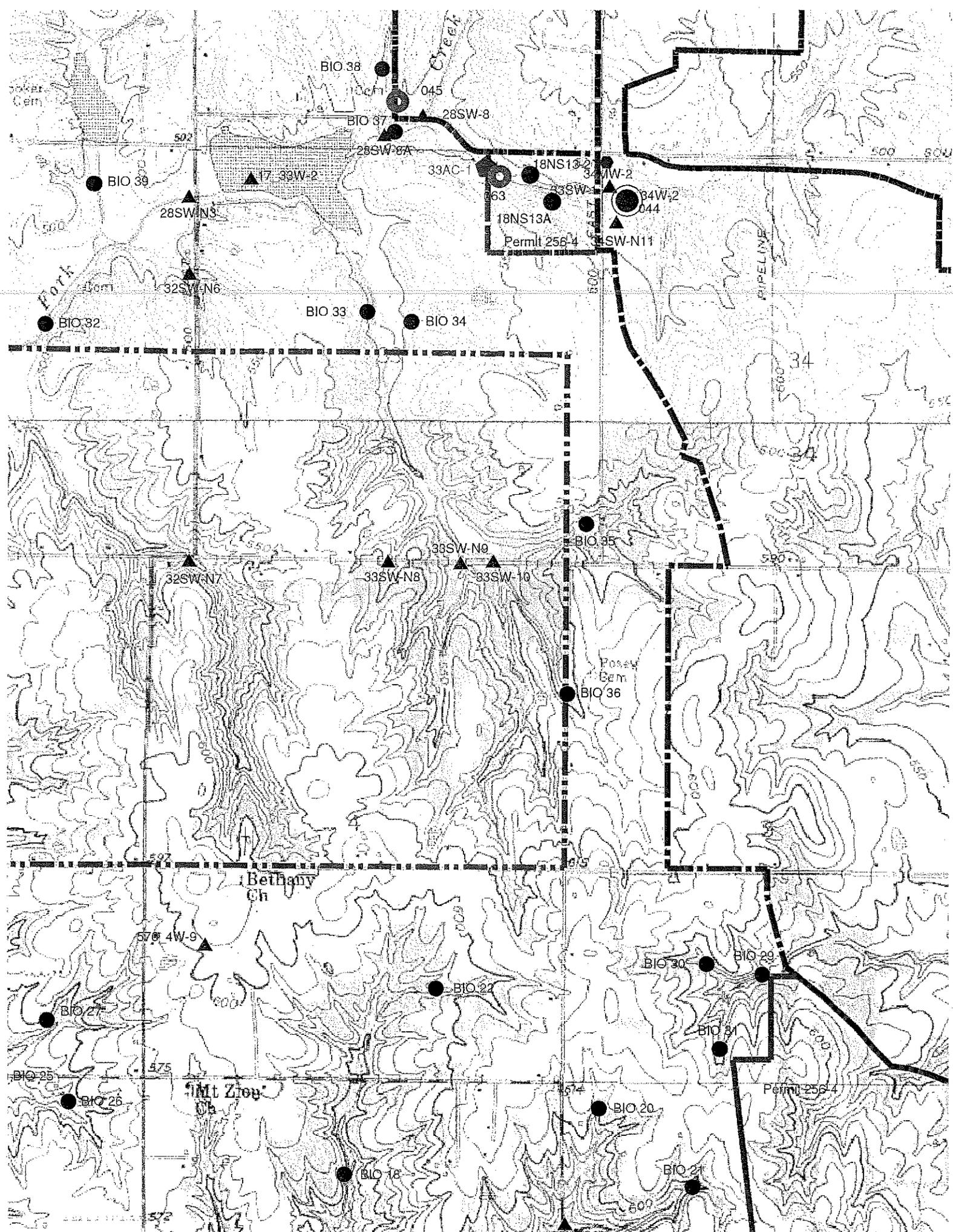
#### **Quality Assurance/Quality Control Measures**

QA/QC samples will be collected in accordance with IDEM protocols, as described in IDEM's Field Surveys Section Field Procedure Manual (2002). Specifically, a field duplicate will be collected at a rate of one duplicate for every 10 samples. A field blank will be collected as one blank for every 20 samples collected, or at a minimum one blank for every sampling event. Field documentation will include sample collection records, quality control records, and general field procedures. Laboratory documentation will include chain-of-custody forms, sample shipment information and management records, test methods, and laboratory data sheets.

#### **2. Biological Assessment**

Biological monitoring and sampling will be conducted downstream of outfalls 03R and 062 (Map 4E1). One sample will be collected at each location during the period of effluent sampling. Biological evaluation methods will include macroinvertebrate and fish sampling as well as stream physical habitat evaluation. Macroinvertebrate monitoring will follow the modified EPA Benthic Macroinvertebrate Protocol designed by IDEM and detailed in Multi-Habitat Macroinvertebrate Collection Procedure. Fish sampling will follow the EPA fish sampling protocol modified by IDEM in Summary of Protocols: Probability Based Site Assessment. Stream physical habitat evaluation will follow the EPA RBP II physical habitat evaluation method outlined by the EPA. Aquatic assemblages will be analyzed using the IDEM Biological Studies Section mIBI and fIBI scores. Bench notes and photographic evidence for each sample location will be submitted with the report.

**APPENDIX A – EXHIBIT 1**







# Memorandum

TO: John W. Watson  
**Baker & McKenzie LLP**  
300 East Randolph Street, Suite 5000  
Chicago, IL 60601

DATE: May 23, 2012

FROM: Peabody Midwest Environmental Services

## Technical Memorandum on Whole Effluent Toxicity (WET) Testing

Whole Effluent Toxicity (WET) Testing at Midwest mine sites is inappropriate based on the recognition that WET testing is not accurate in the context of mining operations and the streams that are typically present at these operations. Consistent with conditions at Bear Run, many of the water bodies confronted at mine sites in the Illinois Basin are ephemeral or intermittent streams. Because of the sporadic flow, these streams typically do not support obligate aquatic organisms and, accordingly, acute tests are overprotective and unreliable. A chronic WET test in an intermittent stream is overprotective of limited aquatic life with non-continuous wastewater discharges. *Daphnia magna* and fathead minnows are the only appropriate chronic WET test species when receiving waters exhibit naturally elevated salinity or dissolved solids conditions and discharges are continuous and total suspended solids (TSS) discharge limits are at or above 35 mg/L. For these reasons, EPA WET testing guidance allows for state exemptions from chronic WET testing requirements for zero/low flow conditions (USEPA draft 2004; National Whole Effluent Toxicity (WET) Implementation Guidance Under the NPDES Program, Office of Wastewater Management, EPA Doc. 832-B-04-003 released December 28, 2004). Accordingly WET testing is an inappropriate means to evaluate discharges from Bear Run.

WET test species *Ceriodaphnia dubia* is not natively present at the site (Bioassessment Conducted for the Bear Run Mine Amendment 5 404 Permit). Not all species show the same resistivity to effluent, both to individual and combined contaminants in effluent, as they differ in the ways they respond to contaminant exposure. How the species sequester or eliminate (depurations) exposure to the contaminant, whether or not the species has a prior history of exposure (acclimation) or adapted sensitivity to the contaminant, and its type of exposure and avoidance capabilities are all important factors to be considered (Chapman, 2000). Differences in tolerance levels can be large even amongst WET test species. Differences in the maximum acceptable toxicant concentrations (range between NOEC and lowest observed effect concentration) of about an order of magnitude have been found between *Daphnia magna* (56-75%), *Daphnia pulex* (1-10%), and *Ceriodaphnia dubia* (25-56%) (Chapman, 2000; Chapman et al., 1994). Similar differences have been found with exposure to individual and inorganic chemicals. Thus the use of a single toxicity value elucidated from a WET test conducted on a single non native species is likely non representative of the native aquatic assemblage and should not be used as a bright line regulation.

The laboratory is a controlled environment that eliminates many of the abiotic (climate, temperature, general environmental quality) and biotic (species, life stage, sex and reproductive status, nutritional and disease status, competition and predation) modifying factors that can impact an organism's response to toxicants. WET tests should not be used as an absolute prediction tool for aquatic species response in natural conditions because they do not incorporate relative sensitivities of the

laboratory versus the field, covariates of toxicity (i.e. additive or synergistic effects), differences of exposure routes (food is an exposure route not considered by WET tests), and often use nonindigenous organisms (Chapman, 2000). Not only can sensitivities differ between laboratory cultures and field collected populations but other factors such as size, age, sexual differences, timing to molt, and seasonal differences can also affect the organism's sensitivities (Chapman, 2000; McGee et al., 1998; Rand, 1995). Whole effluent toxicity levels are generally, but not always, overprotective (Chapman, 2000).

WET tests are typically conducted under conservative exposure conditions, where test organisms are exposed to non-normal and worst case dilution conditions. Non normal conditions can result in pre-stress conditions that increase the organism's sensitivity to other stressors. Changes in temperature or background water quality (for instance low dissolved or suspended solids, which allows toxicants to be more bioavailable throughout the water column) can have significant impacts on toxicity results. For example, hardness can skew the results of the toxicity test and may affect the expression of toxicity in the conduct of the test (i.e. the accuracy of the tests at predicting toxicity) (USEPA 1996). Other parameters such as TDS (hardness, salinity, conductivity), turbidity, DO, pH, micronutrients, and bacteria counts can impact test organisms physiology, sensitivity, and biological response, therefore test variability at all levels can be affected by variability in dilution water quality (USEPA, 2000). This has led the EPA, in its published methods manual, to disqualify some WET results when unusual ionic conditions are present, "Adverse effects of low dissolved oxygen (DO) concentrations, high concentrations of suspended and/or dissolved solids, and extremes of pH, alkalinity, or hardness may mask the presence of toxic substances" (USEPA 2002). Because of the possibility of temporary elevated TDS concentrations at some outfalls, the facts presented here would make the use of WET tests at mines unreasonable. This fact was recognized by EPA Region 5 during the Vermillion Grove study.

WET testing is typically related to worst-case dilution conditions rather than the actual receiving stream dilutions (Chapman, 2000). This is especially true in mining environments with intermittent discharge where the first ephemeral stream capable of supporting aquatic assemblages may be a significant distance downstream of the watershed. In addition effluent composition changes over time and discharges from outfalls are intermittent at mining sites. Effects of intermittent exposure to toxicants can be significantly different from effects related to sustained exposure, which is inherent to WET tests. Several cases have shown toxicity from intermittent exposures can result in less toxicity than sustained exposures (Fisher et al., 1994; Hosmer et al, 1998). Differences between sustained and intermittent exposure were recognized prior to the implementation of WET tests (Ingersoll and Winner 1982; Cairns et al., 1981), but have received limited study. WET tests are conducted in the absence of environmental processes, such as photodegradation, sorption and transformation, biodegradation, hydrolysis, and oxidation and reduction that could ameliorate exposure (toxicity) in the wild. WET tests do not account for avoidance strategies or ecological compensation and regulation mechanisms that often allow for species acclimation or adaptation. For example populations of organisms have been shown to evolve resistance to metal contaminants (Klerks and Weis, 1987; Leppanen et al., 1998). WET testing is inappropriate and expensive, especially considering the how unreliable the results may be.



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- U.S. EPA. Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Ed. EPA-821-R-02-013. October, 2002. Section 11.3.2 @ pg. 53
- Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the NPDES Program. EPA-833-R-00-003 (June, 2000); p. D-7 (WET-IX Docket #B.12).

MEMORANDUM

TO : [Illegible]

FROM : [Illegible]

SUBJECT: [Illegible]

[Illegible text]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 27 2013

REPLY TO THE ATTENTION OF:

WN-16J

Ms. Jessica Dexter  
Environmental Law & Policy Center  
35 East Wacker Drive, Suite 1600  
Chicago, Illinois 60601

Dear Ms. Dexter:

Thank you for your August 1, 2013, letter to Administrator McCarthy, in which you supplemented the December 17, 2009, petition pertaining to Indiana's National Pollutant Discharge Elimination System (NPDES) program. I am responding to that letter. The U.S. Environmental Protection Agency will add the letter to the record for the petition. As you know, EPA has been gathering information on Indiana's NPDES program in response to your petition. On May 16, 2012, after soliciting comments from the petitioners and the State, we provided you with a protocol describing our planned activities. Since that time, EPA has approved amendments to Indiana's antidegradation policy, as well as methods to implement that policy; reviewed draft permits for 21 major dischargers; and provided comments to the Indiana Department of Environmental Management (IDEM) on five draft general permits. EPA has also been reviewing the November 2012 Memorandum of Understanding on coal mining between IDEM and the Indiana Department of Natural Resources; the IDEM compliance evaluation and enforcement files for coal mines; how IDEM applied its antidegradation policy to the Jeffersonville, Austin, and McCordsville permits; and the 2012 revisions to Indiana's NPDES administrative code for concentrated animal feeding operations.

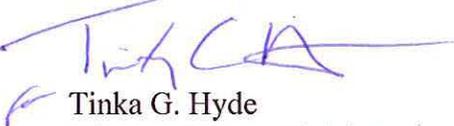
It is our understanding that IDEM plans to provide the remaining four draft general permits, including the permit for discharges from coal mines, to EPA this fall. The petitioners will have an opportunity to comment on and appeal the general permits after IDEM publishes notice of its intent to issue the permits.

For its part, Indiana has enacted statutory changes and formally solicited public comment on administrative code changes necessary to move administration of the State's NPDES general permits program from the Water Pollution Control Board (now the Water Pollution Control Division) to IDEM. The move will eliminate a conflict of interest in the program and create a system in which general permits can be reissued every five years. In addition, the Indiana regulations, at 327 Ind. Adm. Code 15-2-9(b), now allow interested persons to petition IDEM to require a source that has an existing or proposed discharge to apply for an NPDES individual permit rather than obtain an authorization under a general permit.

EPA continues to review your petition and we will respond to you in writing once we have completed our review of the issues raised in the petition as supplemented by your correspondence dated April 29, 2010, August 20, 2010, and August 1, 2013.

Thank you for your interest in protecting Indiana's waters. Please do not hesitate to contact Maria Gonzalez, Associate Regional Counsel, at (312)886-6630, if you have any questions or comments.

Sincerely,



Tinka G. Hyde  
Director, Water Division

Enclosures

cc: Bruno Pigott, IDEM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 27 2013

REPLY TO THE ATTENTION OF:

WN-16J

Albert Ettinger, Esq.  
53 W. Jackson Blvd.  
Suite #1664  
Chicago, Illinois 60601

Dear Mr. Ettinger:

Thank you for your August 1, 2013, letter to Administrator McCarthy, in which you supplemented the December 17, 2009, petition pertaining to Indiana's National Pollutant Discharge Elimination System (NPDES) program. I am responding to that letter. The U.S. Environmental Protection Agency will add the letter to the record for the petition. As you know, EPA has been gathering information on Indiana's NPDES program in response to your petition. On May 16, 2012, after soliciting comments from the petitioners and the State, we provided you with a protocol describing our planned activities. Since that time, EPA has approved amendments to Indiana's antidegradation policy, as well as methods to implement that policy; reviewed draft permits for 21 major dischargers; and provided comments to the Indiana Department of Environmental Management (IDEM) on five draft general permits. EPA has also been reviewing the November 2012 Memorandum of Understanding on coal mining between IDEM and the Indiana Department of Natural Resources; the IDEM compliance evaluation and enforcement files for coal mines; how IDEM applied its antidegradation policy to the Jeffersonville, Austin, and McCordsville permits; and the 2012 revisions to Indiana's NPDES administrative code for concentrated animal feeding operations.

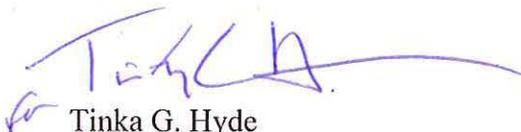
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Sincerely,



Tinka G. Hyde  
Director, Water Division

Enclosures

cc: Bruno Pigott, IDEM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 27 2013

REPLY TO THE ATTENTION OF:

WN-16J

Kim Ferraro, Esq.  
Hoosier Environmental Council  
150 Lincolnway, Suite 3002  
Valparaiso, Indiana 46383

Dear Mr. Ferraro:

Thank you for your August 1, 2013, letter to Administrator McCarthy, in which you supplemented the December 17, 2009, petition pertaining to Indiana's National Pollutant Discharge Elimination System (NPDES) program. I am responding to that letter. The U.S. Environmental Protection Agency will add the letter to the record for the petition. As you know, EPA has been gathering information on Indiana's NPDES program in response to your petition. On May 16, 2012, after soliciting comments from the petitioners and the State, we provided you with a protocol describing our planned activities. Since that time, EPA has approved amendments to Indiana's antidegradation policy, as well as methods to implement that policy; reviewed draft permits for 21 major dischargers; and provided comments to the Indiana Department of Environmental Management (IDEM) on five draft general permits. EPA has also been reviewing the November 2012 Memorandum of Understanding on coal mining between IDEM and the Indiana Department of Natural Resources; the IDEM compliance evaluation and enforcement files for coal mines; how IDEM applied its antidegradation policy to the Jeffersonville, Austin, and McCordsville permits; and the 2012 revisions to Indiana's NPDES administrative code for concentrated animal feeding operations.

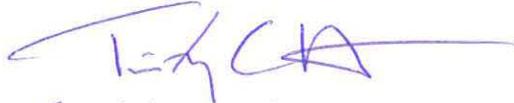
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Sincerely,



Tinka G. Hyde  
Director, Water Division

Enclosures

cc: Bruno Pigott, IDEM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 27 2013

REPLY TO THE ATTENTION OF:

WN-16J

Mr. Bowden Quinn  
Conservation Program Coordinator  
Sierra Club Hoosier Chapter  
1915 W. 18<sup>th</sup> Street, Suite D  
Indianapolis, Indiana 46202

Dear Mr. Quinn:

Thank you for your August 1, 2013, letter to Administrator McCarthy, in which you supplemented the December 17, 2009, petition pertaining to Indiana's National Pollutant Discharge Elimination System (NPDES) program. I am responding to that letter. The U.S. Environmental Protection Agency will add the letter to the record for the petition. As you know, EPA has been gathering information on Indiana's NPDES program in response to your petition. On May 16, 2012, after soliciting comments from the petitioners and the State, we provided you with a protocol describing our planned activities. Since that time, EPA has approved amendments to Indiana's antidegradation policy, as well as methods to implement that policy; reviewed draft permits for 21 major dischargers; and provided comments to the Indiana Department of Environmental Management (IDEM) on five draft general permits. EPA has also been reviewing the November 2012 Memorandum of Understanding on coal mining between IDEM and the Indiana Department of Natural Resources; the IDEM compliance evaluation and enforcement files for coal mines; how IDEM applied its antidegradation policy to the Jeffersonville, Austin, and McCordsville permits; and the 2012 revisions to Indiana's NPDES administrative code for concentrated animal feeding operations.

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Sincerely,



Tinka G. Hyde  
Director, Water Division

Enclosures

cc: Bruno Pigott, IDEM