INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: July 24, 2007

RE: Headwaters Resources, Inc. / 073-23909-00040

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

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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

Enclosures
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100 North Senate Avenue
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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Headwaters Resources, Inc. at NIPSCO – Schahfer Station
2723 East, 1500 North
Wheatfield, Indiana 46392

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: 073-23909-00040	
Issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: July 24, 2007 Expiration Date: July 24, 2012

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary fly ash processing facility.

Source Address:	2723 East, 1500 North, Wheatfield, Indiana 46392
Mailing Address:	4043 North Euclid Avenue, Bay City, MI 48706
General Source Phone Number:	(219) 384-8357
SIC Code:	4911, 3295
County Location:	Jasper
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This stationary source consists of an electric utility generating station with an on-site contractor that processes and moisture conditions fly ash:

(1) The electric utility generating station, NIPSCO, Schahfer Station, is the primary operation and is located at 2723 East, 1500 North, Wheatfield, Indiana; and

(2) The fly ash processor, Headwaters Resources, Inc., is the supporting operation and is located at 2723 East, 1500 North, Wheatfield, Indiana.

IDEM has determined that NIPSCO, Schahfer Station and Headwaters Resources, Inc., will be considered one source as defined by 326 IAC 2-7-1(22) based on contractual control. Therefore, the term “source” in the Part 70 documents refers to both NIPSCO, Schahfer Station and Headwaters Resources, Inc., as one source.

Separate Part 70 Operating permits will be issued to NIPSCO, Schahfer Station and Headwaters Resources, Inc., solely for administrative purposes.

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

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

(a) One (1) fly ash processing facility, permitted to be constructed in 2006, consisting of the following:

(1) One (1) pneumatic conveyor system, identified as PC-1 with a maximum transfer capacity of 25 tons of pre-conditioned fly ash per hour from each of the NIPSCO, Schahfer Station, Units 17 and 18, to the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(2) One (1) pneumatic truck unloading system, identified as PT-1, with a maximum transfer capacity of 25 tons of pre-conditioned fly ash (from NIPSCO facilities) per hour from each pneumatic truck to one (1) of four (4) unloading ports at the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(3) One (1) fly ash storage silo, identified as FAS-1, with a maximum storage capacity of 2,500 tons of fly ash, using one (1) baghouse, identified as HRI-1, for separation of fly ash and conveying air. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(4) Two (2) enclosed pugmills, identified as PM-1 and PM-2, each with a maximum processing capacity of 150 tons of fly ash per hour. Particulate emissions are minimized by equipment enclosure and moisture addition.

(5) One (1) radial conveyor system, identified as C-1 and RS-1, with a maximum transfer capacity of 300 tons of processed fly ash per hour from the two pugmills, PM-1 and PM-2, to storage piles. Particulate emissions are minimized by moisture addition.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities that are specifically regulated, as defined in 326 IAC 2-7-1(21):

The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment not associated with the production process. [326 IAC 6-3]

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 – Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

(a) This permit, 073-23909-00040, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.4 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

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

B.5 Enforceability [326 IAC 2-7-7]

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

B.6 Severability [326 IAC 2-7-5(5)]

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

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.8 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) The "responsible official" is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

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

and

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

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

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements that are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to 073-23909-00040 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.15 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B – Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

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

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch – Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

B.22 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.23 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

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

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

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

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

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

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

B.24 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

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

B.26 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.6 Motor Vehicle Fugitive Dust Sources [326 IAC 6-4-4]

Pursuant to 326 IAC 6-4-4, no vehicle, shall be driven or moved on any public street, road, alley, highway, or other thoroughfare, unless such vehicle is so constructed as to prevent its contents from dripping, sifting, leaking, or otherwise escaping therefrom so as to create conditions which result in fugitive dust. This section applies only to the cargo any vehicle may be conveying and mud tracked by the vehicle.

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

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

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52, IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

Testing Requirements [326 IAC 2-7-6(1)]

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

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C – Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50, IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

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

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit or at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

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

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing Electric Utility Steam Generating Unit, then for that project the Permittee shall:

(1) Submit to IDEM, OAQ a copy of the information required by (c)(1) in Section C-General Record Keeping Requirements

(2) Submit a report to IDEM, OAQ within sixty (60) days after the end of each year during which records are generated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements. The report shall contain all information and data describing the annual emissions for the emissions units during the calendar year that preceded the submission of report.

Reports required in this part shall be submitted to:

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

If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C – General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit other than Electric Utility Steam Generating Unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C – General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C – General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C – General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit other than Electric Utility Steam Generating Unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C – General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

(i) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C – General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) fly ash processing facility, permitted to be constructed in 2006, consisting of the following:

(1) One (1) pneumatic conveyor system, identified as PC-1 with a maximum transfer capacity of 25 tons of pre-conditioned fly ash per hour from each of the NIPSCO, Schahfer Station, Units 17 and 18, to the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(2) One (1) pneumatic truck unloading system, identified as PT-1, with a maximum transfer capacity of 25 tons of pre-conditioned fly ash (from NIPSCO facilities) per hour from each pneumatic truck to one (1) of four (4) unloading ports at the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(3) One (1) fly ash storage silo, identified as FAS-1, with a maximum storage capacity of 2,500 tons of fly ash, using one (1) baghouse, identified as HRI-1, for separation of fly ash and conveying air. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(4) Two (2) enclosed pugmills, identified as PM-1 and PM-2, each with a maximum processing capacity of 150 tons of fly ash per hour. Particulate emissions are minimized by equipment enclosure and moisture addition.

(5) One (1) radial conveyor system, identified as C-1 and RS-1, with a maximum transfer capacity of 300 tons of processed fly ash per hour from the two pugmills, PM-1 and PM-2, to storage piles. Particulate emissions are minimized by moisture addition.

Insignificant Activities:

(a) Processed Fly Ash Storage Pile

(b) Paved and Unpaved Roads

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PM and PM_{10} PSD Minor Limits [326 IAC 2-2]

(a) The amount of fly ash processed in the enclosed pugmills, PM-1 and PM-2, shall not exceed 300,000 tons of fly ash per 12-consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, shall be limited to less than 5.15 pounds per hour.

(c) The PM_{10} emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, shall be limited to less than 3.40 pounds per hour.

Compliance with these limits in conjunction with the potential emissions from the fly ash storage piles, paved roads, and unpaved roads will limit the PM and PM_{10} emissions to less than twenty-five (25) tons per year and fifteen (15) tons per year, respectively, and renders the requirements of 326 IAC 2-2 (PSD) not applicable to the fly ash processing facility.

D.1.2 Particulate Emission Limitation [326 IAC 6-3-2]

(a) Pneumatic Conveyor, PC-1
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the pneumatic conveyor system, identified as PC-1, shall not exceed 44.58 pounds per hour when operating at a process weight rate of 50 tons of fly ash per hour.

(b) Pneumatic Truck Unloading, PT-1
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the pneumatic truck unloading station, identified as PT-1, shall not exceed 51.28 pounds per hour when operating at a process weight rate of 100 tons of fly ash per hour.

(c) Fly Ash Storage Silo, FAS-1
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the fly ash storage silo, identified as FAS-1, shall not exceed 63.00 pounds per hour when operating at a process weight rate of 300 tons of fly ash per hour.

(d) Pugmill, PM-1
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the enclosed pugmill, identified as PM-1, shall not exceed 55.44 pounds per hour when operating at a process weight rate of 150 tons of fly ash per hour.

(e) Pugmill, PM-2
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the enclosed pugmill, identified as PM-2, shall not exceed 55.44 pounds per hour when operating at a process weight rate of 150 tons of fly ash per hour.

(f) Radial Conveyor System, C-1 and RS-1
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the radial conveyor system, identified as C-1 and RS-1, shall not exceed 63.00 pounds per hour when operating at a process weight rate of 300 tons of fly ash per hour.

(g) The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for the:

(a) Pneumatic Conveyor System, PC-1,

(b) Pneumatic Truck Unloading System, PT-1,

(c) Fly Ash Storage Silo, FAS-1,

(d) Baghouse, HRI-1,

(e) Pugmill, PM-1,

(f) Pugmill, PM-2, and

(g) Radial Conveyor System, C-1 and RS-1.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after startup of the fly ash processing facility, compliance with the PM and PM_{10} limitations in Condition D.1.1 – PM and PM_{10} PSD Minor Limits, shall be determined by a performance stack test conducted using methods as approved by the Commissioner. PM_{10} includes filterable and condensable PM_{10}. This testing shall be repeated every 5 years following the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

D.1.5 Emission Controls Operation

(a) Conveyance of the pre-conditioned fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, shall be pneumatic.

(b) The baghouse, HRI-1, for particulate emissions control shall be in operation and control particulate emissions whenever pre-conditioned fly ash from the pneumatic conveyor system, PC-1, and/or the pneumatic truck unloading system, PT-1, is being transferred to the fly ash storage silo, FAS-1.

In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the baghouse, HRI-1, exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

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

D.1.7 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall record the pressure drop across the baghouse, HRI-1, at least once per day when pre-conditioned fly ash from the pneumatic conveyor system, PC-1, and/or the pneumatic truck unloading system, PT-1, is being transferred to the fly ash storage silo, FAS-1. When for any one reading, the pressure drop across the baghouses is outside the range of 1.0 and 6.0 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.6 – Visible Emissions Notations, the Permittee shall maintain records of the daily visible emission notations of the baghouse, HRI-1, exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document compliance with Condition D.1.7 – Baghouse Parametric Monitoring, the Permittee shall maintain records of the daily pressure drop readings of the baghouse, HRI-1. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 – PM and PM_{10} PSD Minor Limits, shall be submitted to the address listed in Section C – General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Emission Unit Description [326 IAC 2-7-5(15)] Insignificant Activities

The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment not associated with the production process.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Emission Limitation

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Headwaters Resources, Inc. at NIPSCO – Schahfer Station
Source Address: 2723 East, 1500 North, Wheatfield, Indiana 46392
Mailing Address: 4043 North Euclid Avenue, Bay City, MI 48706
Part 70 Permit No.: T 073-23909-00040

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify): _____

☐ Report (specify): _____

☐ Notification (specify): _____

☐ Affidavit (specify): _____

☐ Other (specify): _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

100 North Senate Avenue
MC 61-53, IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name:	Headwaters Resources, Inc. at NIPSCO – Schahfer Station
Source Address:	2723 East, 1500 North, Wheatfield, Indiana 46392
Mailing Address:	4043 North Euclid Avenue, Bay City, MI 48706
Part 70 Permit No.:	T 073-23909-00040

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency
Describe the cause of the Emergency

If any of the following are not applicable, mark N/A

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? ☐ Y ☐ N Describe: Type of Pollutants Emitted: ☐ TSP ☐ PM-10 ☐ SO_2 ☐ VOC ☐ NO_X ☐ CO ☐ Pb ☐ other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Headwaters Resources, Inc. at NIPSCO – Schahfer Station
Source Address: 2723 East, 1500 North, Wheatfield, Indiana 46392
Mailing Address: 4043 North Euclid Avenue, Bay City, MI 48706
Part 70 Permit No.: T 073-23909-00040
Facility: Enclosed Pugmills, PM-1 and PM-2
Parameter: Amount of fly ash processed
Limit: Pugmills PM-1 and PM-2 are limited to a total of 300,000 tons of fly ash processed per year.

YEAR: _____

Month	This Month	Previous 11 Months	12-Month Period

☐ No deviation occurred in this quarter.

☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Headwaters Resources, Inc. at NIPSCO – Schahfer Station
Source Address: 2723 East, 1500 North, Wheatfield, Indiana 46392
Mailing Address: 4043 North Euclid Avenue, Bay City, MI 48706
Part 70 Permit No.: T 073-23909-00040

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD
Permit Requirement (specify permit condition #)
Date of Deviation: **Duration of Deviation:**
Number of Deviations:
Probable Cause of Deviation:
Response Steps Taken:
Permit Requirement (specify permit condition #)
Date of Deviation: **Duration of Deviation:**
Number of Deviations:
Probable Cause of Deviation:
Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Part 70 Significant Source Modification and Initial Part 70 Operating Permit

Source Description and Location

Source Name:	Headwaters Resources, Inc.
Source Location:	2723 East, 1500 North, Wheatfield, IN 46392
County:	Jasper
SIC Code:	4911, 3295
Operation Permit No.:	T 073-23909-00040
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	073-23711-00040
Permit Reviewer:	Kimberly Cottrell

Public Notice Information

On February 27, 2007, the Office of Air Quality (OAQ) had a notice published in the Rensselaer Republican in Rensselaer, Indiana, stating that Headwaters Resources, Inc. had applied for a significant modification to install a fly ash processing facility to be located at NIPSCO – Schahfer Station and an initial Part 70 Operating Permit for its operation. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments Received

On March 28, 2007, OAQ received comments from Thomas Schmaltz of Headwaters Resources, Inc. The comments are summarized in the subsequent pages, with IDEM's corresponding responses.

The IDEM does not amend the Technical Support Document (TSD). The TSD is maintained to document the original review. This addendum to the TSD is used to document comments, responses to comments and changes made from the time the permit was drafted until a final decision is made.

The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Comment 1:

Condition D.1.1 PM and PM_{10} PSD Minor Limits
The PM limit of 5.70 lb/hr stated in Condition D.1.1 was for the pneumatic conveyance systems and fly ash storage silos only. The limit should take into account the emissions associated with the fugitive emissions from unpaved roads and storage piles. Headwaters Resources, Inc. is suggesting a revised PM limit for the conveyance systems and storage silo of 5.20 lb/hr. This limit was determined by subtracting the potential emissions associated with the fugitive emission sources from the PSD thresholds of 25 tons per year of PM.

D.1.1 PM and PM_{10} PSD Minor Limits

(a) The PM Emissions from the transfer of fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, shall be limited to less than ~~5.70~~ **5.20** pounds per hour.

(b) The PM_{10} Emissions from the transfer of fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, shall be limited to less than 3.42 pounds per hour.

These limitations ~~are equivalent to limiting~~ **ensure that** the PM and PM_{10} emissions **from the conveyance systems and storage silo, as well as the fugitive emissions from the unpaved roads and storage piles are** ~~to~~ less than twenty-five (25) tons per year and fifteen (15) tons per year, respectively. In addition, the PM_{10} emission limitation serves as a surrogate for limiting $PM_{2.5}$ emissions. Compliance with these limits will render the requirements of 326 IAC 2-2 (PSD) not applicable to the fly ash processing facility.

IDEM Response 1:

IDEM agrees that the PSD Minor Limits for PM and PM10 should be updated to more accurately reflect all the limitations needed to render the requirements of 326 IAC 2-2 (PSD) not applicable to the fly ash processing facility. The Emission Unit Description in Section D.1 and Condition D.1.1 are revised as follows:

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) fly ash processing facility, permitted to be constructed in 2006, consisting of the following:

(1) One (1) pneumatic conveyor system, identified as PC-1 with a maximum transfer capacity of 25 tons of pre-conditioned fly ash per hour from each of the NIPSCO, Schahfer Station, Units 17 and 18, to the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(2) One (1) pneumatic truck unloading system, identified as PT-1, with a maximum transfer capacity of 25 tons of pre-conditioned fly ash (from NIPSCO facilities) per hour from each pneumatic truck to one (1) of four (4) unloading ports at the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(3) One (1) fly ash storage silo, identified as FAS-1, with a maximum storage capacity of 2,500 tons of fly ash, using one (1) baghouse, identified as HRI-1, for separation of fly ash and conveying air. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(4) Two (2) enclosed pugmills, identified as PM-1 and PM-2, each with a maximum processing capacity of 150 tons of fly ash per hour. Particulate emissions are minimized by equipment enclosure and moisture addition.

(5) One (1) radial conveyor system, identified as C-1 and RS-1, with a maximum transfer capacity of 300 tons of processed fly ash per hour from the two pugmills, PM-1 and PM-2, to storage piles. Particulate emissions are minimized by moisture addition.

Insignificant Activities:

(a) Processed Fly Ash Storage Pile

(b) Paved and Unpaved Roads

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PM and PM_{10} PSD Minor Limits [326 IAC 2-2]

(a) The amount of fly ash processed in the enclosed pugmills, PM-1 and PM-2, shall not exceed 300,000 tons of fly ash per 12-consecutive month period with compliance determined at the end of each month.

(b) The PM emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, shall be limited to less than ~~5.70~~ **5.15** pounds per hour.

(c) The PM_{10} emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, shall be limited to less than ~~3.42~~ **3.40** pounds per hour.

Compliance with these limits in conjunction with the potential emissions from the fly ash storage piles, paved roads, and unpaved roads will limit the PM and PM_{10} emissions to less than twenty-five (25) tons per year and fifteen (15) tons per year, respectively, and renders the requirements of 326 IAC 2-2 (PSD) not applicable to the fly ash processing facility.

~~These limitations are equivalent to limiting the PM and PM_{10} emissions to less than twenty-five (25) tons per year and fifteen (15) tons per year, respectively. In addition, the PM_{10} emission limitation serves as a surrogate for limiting $PM_{2.5}$ emissions. Compliance with these limits will render the requirements of 326 IAC 2-2 (PSD) not applicable to the fly ash processing facility.~~

Comment 2:

Condition D.1.3, Preventative Maintenance Plan
The pneumatic conveyance systems (PC-1, PT-1, C-1, and RS-1) do not cause emissions and do not have capture and control. Emissions from the fly ash conditioning operations occur when the fly ash is deposited into the silo that is controlled by Baghouse HRI-1. Because the conveyance operations do not have emissions and do not have capture and control, Headwaters Resources, Inc. feels that a Preventative Maintenance Plan is unnecessary since there are no emission control devices to inspect, maintain, or repair. Please remove the Preventative Maintenance Requirements from these units. Furthermore, Pugmills PM-1 and PM-2, also do not cause emissions or have capture and control. Please remove the Preventative Maintenance Requirements from these units as well.

D.1.3 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for:

~~(a) Pneumatic Conveyor System, PC-1,~~
~~(b) Pneumatic Truck Unloading System, PT-1,~~
(c) Fly Ash Storage Silo, FAS-1,
(d) Baghouse, HRI-1,
~~(e) Pugmill, PM-1,~~
~~(f) Pugmill, PM-2, and~~
~~(g) Radial Conveyor System, C-1 and RS-1.~~

IDEM Response 2:

The Preventive Maintenance Plan (PMP) requirement must be included in every applicable Part 70 permit pursuant to 326 IAC 2-7-5 (13). This rule refers to the Preventive Maintenance Plan (PMP) requirement found in 326 IAC 1-6-3. This Preventive Maintenance Plan (PMP) rule sets out the requirements for:

(a) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment. [326 IAC 1-6-3 (a)(1)]

(b) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions. [326 IAC 1-6-3(a)(2)]

(c) The identification and quantification of the replacement parts for the facility, which the Permittee will maintain in inventory for quick replacement. [326 IAC 1-6-3(a)(2)]

The structure of 326 IAC 1-6-3 applies to the owner or operator of any facility required to obtain a permit and the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. 326 IAC 1-6-3(b) provides that "...as deemed necessary by the commissioner, any person operating a facility shall comply with the requirements of subsection (a) of this section." In addition to preventive maintenance performed on the control devices, preventive maintenance should also be performed on the emission units themselves because lack of proper maintenance on the units can result in increased emissions. Many types of facilities require maintenance in order to prevent excess emissions.

There are no changes to Condition D.1.3 as a result of this comment.

Comment 3:

Condition D.1.4 Testing Requirements
Headwaters Resources, Inc. believes that stack testing is not warranted for such small emissions. Potential, controlled emissions from the source are 4.71 tons/yr of PM and 1.65 tons/yr of PM_{10}. Hourly controlled emissions were calculated to be 1.08 lb/hr of PM and 0.38 lb/hr of PM_{10}. Emissions were calculated using standard AP-42 emission factors and typical control efficiencies for this type of process. These emissions were compared to controlled emissions based on a conservative grain loading of 0.01 gr/dscf and the maximum flow rate of the baghouse. Emissions using the grain loading and flow rate were calculated to be 4.51 tons/yr of PM and 2.30 tons/yr of PM_{10} and 1.03 lb/hr of PM and 0.52 lb/hr of PM_{10}. Headwaters Resources, Inc. believes that the baghouse control technology is well proven for industries that handle fly ash and that further testing requirements are unnecessary.

Stack testing has been conducted at a similar Headwater's facility at a throughput of 150 tons of fly ash per hour plus ancillary operations at the facility. This is the same throughput as is proposed for the project to be constructed at NIPSCO, Schahfer Station. The test yielded results of 0.0004 gr/dscf and 0.0071 lb/hr, significantly less than the conservative value of 0.01 gr/dscf used above.

Per discussion with Kim Cottrell, IDEM, the stack testing requirements for Headwaters were included in this permit to be consistent with the testing requirements for NIPSCO Schahfer Station, Units 17 and 18. However, Units 17 and 18 are boilers, not fly ash operations. There are not any stack testing requirements for any of Schahfer's baghouses controlling emissions from fly ash handling. Therefore, to be consistent with the stack testing requirements of NIPSCO Schahfer Station, the stack testing requirements for fly ash handling, HRI-1 need to be removed.

Headwaters believes that the stack testing requirement has been included on the basis of emissions that would occur absent controls. Headwaters initially submitted an Exemption Determination Request for its fly ash condition operation because it believes that the baghouse is integral to its process. Headwaters believes its baghouse to be integral because the baghouse is necessary to separate the process air from the product. Headwaters is paid per ton of fly ash that exits Headwaters' system, and therefore, Headwaters has financial motivation to ensure that no fly ash escapes from any of the conveyance system or transfer points. Any fly ash lost during the transportation of the fly ash from NIPSCO to the Headwaters operation results in a financial loss to Headwaters. Therefore, the baghouse is necessary to guarantee that the greatest amount of fly ash is captured and processed so that Headwaters has the greatest earnings potential. There is no avoided disposal cost in the proposed Headwaters operation; it is being paid to process a material. Furthermore, in an internal memo from Paul Dubenetzky to the Permits Branch, Office of Air Management, dated March 11, 1999, air/product separation in pneumatic conveying is specifically discussed as a process that can not operate without the control equipment. As Headwaters considers the fly ash from NIPSCO a product due to the manner in which Headwaters is paid by NIPSCO to process the fly ash, the baghouse should be considered integral to the process.

IDEM decided that the baghouse was not integral to the process because a determination was made for the IPL Petersburg facility (125-6565-00002); however, Headwaters does not believe this determination should be applied to its facility for the reasons discussed above. Headwaters maintains its assertion that the baghouse (HRI-1) should be considered integral to the process, and, therefore, this operation should be considered exempt from the requirements to obtain a permit and the requirements to conduct stack testing on HRI-1.

For the above mentioned reasons, Resources, Inc. does not believe that stack testing is warranted for baghouse HRI-1. If IDEM does not agree that stack testing is not warranted, we would like to request that the frequency of the stack testing at least be lessened to an initial test or testing once every 5 years. Resources, Inc. believes that stack testing once every two years is unnecessary for a source of such small emissions.

~~D.1.4 Testing Requirements~~

~~Within 180 days after startup of the fly ash processing facility, compliance with the PM and PM_{10} limitations in Condition D.1.1 – PM and PM_{10} Prevention of Significant Deterioration (PSD) Limitations, shall be determined by a performance stack test conducted using Method 5 or other methods as approved by the Commissioner. This testing shall be repeated by December 31 of every second calendar year following this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.~~

~~For the purpose of this permit, "calendar year" means the twelve (12) moth period from January 1 to December 31 inclusive.~~

IDEM Response 3:

Testing Requirements are required to demonstrate compliance with the PSD Minor Limits for PM and PM_{10} in Condition D.1.1. These PSD Minor limits were necessary because the facility will be located at NIPSCO, Schahfer Station, which is a major source under the Clean Air Act for Prevention of Significant Deterioration and Emission Offset. Furthermore, because NIPSCO, Schahfer Station, is classified as a fossil fuel-fired steam electric plant of more than 250 MMBtu/hr heat input, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability for listed source categories. Since the Headwaters facility will be collocated with NIPSCO, Schahfer Station, all requirements that apply to NIPSCO, Schahfer Station, also apply to Headwaters Resources, Inc.

The original Technical Support Document explains the reasons why the Baghouse HRI-1 is not considered integral to the process; therefore, it is unnecessary to duplicate the analysis in this addendum.

IDEM agrees that testing the fly ash operation once every five (5) years is sufficient to ensure compliance with Condition D.1.1.

IDEM has decided to include a statement in Condition D.1.4 to clarify that PM_{10} includes filterable and condensable PM_{10}.

Condition D.1.4 is revised as follows:

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after startup of the fly ash processing facility, compliance with the PM and PM_{10} limitations in Condition D.1.1 – PM and PM_{10} ~~Prevention of Significant Deterioration (PSD) Limitations~~ **PSD Minor Limits**, shall be determined by a performance stack test conducted using ~~Method 5 or other~~ methods as approved by the Commissioner. **PM_{10} includes filterable and condensable PM_{10}.** This testing shall be repeated ~~by December 31 of~~ every ~~second calendar year~~ **5 years** following ~~this~~ **the most** recent valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

~~For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.~~

Comment 4:

IDEM has had an established guidance for preventive maintenance and compliance monitoring requirements in place since the start of issuing the 1990 CAA permits in Indiana. This guidance does not consider compliance monitoring requirements necessary if the allowable emissions of PM are less than 10 lbs/hour when using a control device. The controlled, potential PM emissions are 1.08 lbs/hour. Since the controlled, potential PM emissions are less than 10 lbs/hour, compliance monitoring is not warranted.

In addition, please remove the record keeping requirements associated with the compliance monitoring. Should Conditions D.1.9 (a) and (b) remain, their reference to Conditions D.1.4 and D.1.5 appear to be typographical errors and should be corrected to D.1.6 and D.1.7, respectively. This comment applies to the following permit conditions:

- Condition D.1.6 Visible Emissions Notations
- Condition D.1.7 Baghouse Parametric Monitoring
- Condition D.1.9 Record Keeping Requirements
- Condition D.2.2 Visible Emissions Notations

- Condition D.2.3 Record Keeping Requirements

~~D.1.6 Visible Emissions Notations~~

~~(a) Visible emissions notations of the baghouse, HRI-1, exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~

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

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

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

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

~~D.1.7 Baghouse Parametric Monitoring~~

~~(a) The Permittee shall record the pressure drop across the baghouse, HRI-1, at least once per day when pre-conditioned fly ash from the pneumatic conveyor system, PC-1, and/or the pneumatic truck unloading system, PT-1, is being transferred to the fly ash storage silo, FAS-1. When for any one reading, the pressure drop across the baghouse is outside the range of 1.0 and 6.0 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Response to Excursions or Exceedances shall be considered a deviation from this permit.~~

~~(b) The instrument used for determining the pressure drop shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

~~D.1.9 Record Keeping Requirements~~

~~(a) To document compliance with Condition D.1.4 – Visible Emission Notations, the Permittee shall maintain records of the daily visible emission notations of the baghouse, HRI-1, exhaust and make such records available upon request by IDEM, OAQ.~~

~~(b) To document compliance with Condition D.1.5 – Baghouse Parametric Monitoring, the Permittee shall maintain records of the daily pressure drop readings of the baghouse, HRI-1, and make such records available upon request by IDEM, OAQ.~~

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

~~D.2.2 Visible Emissions Notations~~

~~(a) Visible emissions notations of the Processed Fly Ash Storage Pile shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.~~

~~(b) If visible emissions are observed crossing the property line or boundaries of the property, right of way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions and Exceedances, shall be considered a deviation from this permit.~~

~~(c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time.~~

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

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

~~D.2.3 Record Keeping Requirements~~

~~(a) To document compliance with Condition D.2.2 – Visible Emission Notations, the Permittee shall maintain records of the Processed Fly Ash Storage Pile and make such records available upon request by IDEM, OAQ.~~

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

IDEM Response 4:

Compliance Monitoring Requirements, including Visible Emissions Notations, Parametric Monitoring, and Record Keeping Requirements corresponding to the Compliance Monitoring Requirements, are required to ensure that the control devices are operating properly.

The intent of Record Keeping Requirements for Visible Emission Notations and Parametric Monitoring is that the Permittee needs to make a record of some sort every day. An example for Visible Emission Notations would be "normal" or "abnormal". Additionally, if Visible Emission Notations were not done on a particular day, the Permittee needs to specify the reason why the observation was not done. An example of this record would be "the unit was not operating".

IDEM has decided that the phrase "when exhausting to the atmosphere" is only appropriate if the unit is capable of venting both indoors and outdoors, such as some woodworking facilities that vent indoors in the winter and outdoors in the summer. According to the information submitted in the application baghouse, HRI-1, is not designed to vent both indoors and outdoors.

Paragraph (a) of Condition D.1.6, Visible Emissions Notations, and paragraphs (a) and (b) of Condition D.1.9, Record Keeping Requirements, are revised as follows:

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the baghouse, HRI-1, exhaust shall be performed once per day during normal daylight operations ~~when exhausting to the atmosphere~~. A trained employee shall record whether emissions are normal or abnormal.

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition ~~D.1.4~~ **D.1.6** – Visible Emissions Notations, the Permittee shall maintain records of the daily visible emission notations of the baghouse, HRI-1, exhaust ~~and make such records available upon request to IDEM, OAQ~~. **The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).**

(b) To document compliance with Condition ~~D.1.5~~ **D.1.7** – Baghouse Parametric Monitoring, the Permittee shall maintain records of the daily pressure drop readings of the baghouse, HRI-1~~, and make such records available upon request to IDEM, OAQ~~. **The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).**

Comment 5:

TSD, Page 9, Permit Level Determination
Headwaters and NIPSCO would like written clarification that the PSD limitations of Condition D.1.1 are specific to this project (Headwaters fly ash conditioning facility) and not accumulative to other new, unrelated operations that NIPSCO or Headwaters may want to perform in the future. Additional written clarification is requested beyond the discussion on page 9, Permit Level Determination, in the TSD.

IDEM Response 5:

The Technical Support Document is specific to each permit determination. Any other application by Headwaters Resources, Inc., or NIPSCO, Schahfer Station, would be evaluated based on the information submitted at the time of application.

Comment 6:

TSD, Page 10, CAM Applicability
The CAM applicability analyses for PM and PM_{10} on page 10 of the TSD indicate that the fugitive emissions associated with the storage pile have an emission limitation. This is not the case. Please change the applicability determination to state that there is no emission limitation associated with the fugitive emissions from the storage pile.

IDEM Response 6:

IDEM agrees that the requirements in original Condition D.2.1 are not emission limitations; therefore, the fugitive dust requirements specified in original Condition D.2.1 have been removed and the visible emissions notations and record keeping requirements for the Processed Fly Ash Storage Pile have been moved from Section D.2 to Section D.1. As a result, Section D.2 is removed in its entirety and Section D.3 is renumbered as D.2. The revisions are as follows:

~~SECTION D.2 FACILITY OPERATION CONDITIONS~~

~~Emission Unit Description [326 IAC 2-7-5(15)] Fugitive Emissions~~

~~(a) Processed Fly Ash Storage Pile~~

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

~~Emission Limitations and Standards [326 IAC 2-7-5(1)]~~

~~D.2.1 Fugitive Dust Emission Limitations [326 IAC 6-4-2]~~

~~Pursuant to 326 IAC 6-4-2:~~

~~(a) Any fly ash storage pile generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:~~

~~(1) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:~~

$$P = \frac{100\,(R - U)}{U}$$

~~Where~~
~~P = Percentage increase~~
~~R = Number of particles of fugitive dust measured at downward receptor site~~
~~U = Number of particles of fugitive dust measured at upwind or background site~~

~~(2) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:~~

$$P_R = (1.5\ N)\ P$$

~~Where~~
~~N = Fraction of fugitive dust that is respirable dust;~~
~~P_R = allowable percentage increase in dust concentration above background; and~~
~~P = no value greater than sixty-seven percent (67%).~~

~~(3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.~~

~~(4) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.~~

~~(b) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.~~

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

~~D.2.2 Visible Emissions Notations [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

~~(a) Visible emission notations of the Processed Fly Ash Storage Pile shall be performed at least once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.~~

~~(b) If visible emissions are observed crossing the property line or boundaries of the property, right-of-way, or easement on which the source is located, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions and Exceedances, shall be considered a deviation from this permit.~~

~~(c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation.~~

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

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

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

~~D.2.3 Record Keeping Requirements~~

~~(a) To document compliance with Condition D.2.2 – Visible Emissions Notations, the Permittee shall maintain records of the daily visible emission notations of the Processed Fly Ash Storage Pile. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).~~

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

SECTION ~~D.3~~ D.2 FACILITY OPERATION CONDITIONS

Emission Unit Description [326 IAC 2-7-5(15)] Insignificant Activities

The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment not associated with the production process.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

~~D.3.1~~ **D.2.1** Particulate Emission Limitation

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

Comment 7:

TSD, Appendix A, Page 1
The controlled PM/PM_{10} emissions from the baghouse appear to be based on a 99%/95% control efficiency, respectively. Particulate emissions from this source will not be comprised of condensables; therefore, PM_{10} emissions will be equal to or smaller than the total particulate emissions. We believe that the 99% control efficiency that has been applied to the PM emissions also is appropriate for the PM10 emissions. This would result in potential, controlled PM10 emissions of 1.65 tons per year and 0.38 pound per hour. Appropriate changes are needed in the summary calculations and other affected tables of the TSD.

IDEM Response 7:

The minimum control efficiencies for PM or PM_{10} are not specified in the air operating permit, and the change in the limited potential to emit calculations do not change the PSD Minor Limits specified in Condition D.1.1. There are no changes to the permit as a result of this comment.

Comment 8:

TSD, Appendix A, Page 1
The maximum silo tonnage capacities are related to Class C and Class F fly ash. In a previous discussion with IDEM, it was decided that all fly ash class designations should be removed from the facility descriptions and corresponding permit conditions. The capacity of the silo should be stated as 2,500 tons to be consistent throughout the permit. Related to silo, pugmills, and processing capacities in the TSD, it would be helpful to clarify that all tonnages stated are based on dry weight.

IDEM Response 8:

Based on discussion with Headwaters Resource, Inc., IDEM removed all fly ash class designations from the facility descriptions and corresponding permit conditions prior to the Public Notice period. The Appendix A is supplemental information for the operating permit and not a facility description or permit condition. There are no changes to the permit as a result of this comment.

Other Changes

Upon further review, the OAQ has decided to make the following revisions to the permit:

Change No. 1:

The IDEM address has been updated throughout the permit as follows to include the mail code specific to each section of the Office of Air Quality:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

Change No. 2:

Paragraph (b) of Condition C.15, Actions Related to Noncompliance Demonstrated by a Stack Test, is revised as follows to correct a typographical error:

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in ~~one hundred and twenty (120) days~~ **one hundred twenty (120) days** is not practicable, IDEM, OAQ may extend the retesting deadline.

Change No. 3:

IDEM has corrected a typographical error within the Table of Contents referencing the PSD Minor Limits included in Condition D.1.1. The revised Condition Title is as follows:

D.1.1 PM and PM_{10} ~~Prevention of Significant Deterioration (PSD) Limitations~~ **PSD Minor Limits** [326 IAC 2-2]

Change No. 4:

IDEM has added a quarterly reporting requirement and reporting form to document compliance with the throughput limit for processed fly ash that was added to the PSD Minor Limits in Condition D.1.1. The new requirements are as follows:

D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 – PM and PM_{10} PSD Minor Limits, shall be submitted to the address listed in Section C – General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

Part 70 Quarterly Report

Source Name: Headwaters Resources, Inc. at NIPSCO – Schahfer Station
Source Address: 2723 East, 1500 North, Wheatfield, Indiana 46392
Mailing Address: 4043 North Euclid Avenue, Bay City, MI 48706
Part 70 Permit No.: T 073-23909-00040
Facility: Enclosed Pugmills, PM-1 and PM-2
Parameter: Amount of fly ash processed
Limit: Pugmills PM-1 and PM-2 are limited to a total of 300,000 tons of fly ash processed per year.

YEAR: _____

Month	This Month	Previous 11 Months	12-Month Period

☐ No deviation occurred in this quarter.
☐ Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted By: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

IDEM Contact

Questions regarding this proposed permit can be directed to Syed Jaffery at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-9327 or toll free at 1-800-451-6027 extension 3-9327.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	Headwaters Resources, Inc.
Source Location:	2723 East, 1500 North, Wheatfield, IN 46392
County:	Jasper
SIC Code:	4911, 3295
Operation Permit No.:	T 073-23909-00040
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	073-23711-00040
Permit Reviewer:	Kimberly Cottrell

Source Definition

This stationary source consists of an electric utility generating station with an on-site contractor that processes and moisture conditions fly ash:

(1) The electric utility generating station, NIPSCO, Schahfer Station, is the primary operation and is located at 2723 East, 1500 North, Wheatfield, Indiana; and

(2) The fly ash processor, Headwaters Resources, Inc., is the supporting operation and is located at 2723 East, 1500 North, Wheatfield, Indiana.

IDEM has determined that NIPSCO, Schahfer Station and Headwaters Resources, Inc., will be considered one source as defined by 326 IAC 2-7-1(22) based on contractual control. Therefore, the term “source” in the Part 70 documents refers to both NIPSCO, Schahfer Station and Headwaters Resources, Inc., as one source.

Separate Part 70 Operating permits will be issued to NIPSCO, Schahfer Station and Headwaters Resources, Inc., solely for administrative purposes.

Existing Approvals

NIPSCO, Schahfer Station was issued Part 70 Operating Permit No. 073-6792-00008 on September 7, 2006.

There have been no previous approvals issued to Headwaters Resources, Inc.

County Attainment Status

The source is located in Jasper County.

Table 1: County Attainment Status	
Pollutant	**Status**
PM_{10}	attainment
$PM_{2.5}$	attainment
SO_2	attainment
NO_2	attainment
8-hour Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and nitrogen oxides (NO_X) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to ozone. Jasper County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Jasper County has been classified as attainment for $PM_{2.5}$. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for $PM_{2.5}$ emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for $PM_{2.5}$ emissions, it has directed states to regulate PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions.

(c) Jasper County has been classified as attainment or unclassifiable for PM_{10}, SO_2, NO_2, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

(e) On October 25, 2006, a final rule took effect revoking the one-hour ozone standard in Indiana.

Actual Emissions

No previous emission data has been received from the Headwaters Resources, Inc.

Description of Proposed New Source Construction

The Office of Air Quality (OAQ) has reviewed a new source construction application, submitted by Headwaters Resources, Inc., on October 2, 2006, regarding the construction of a fly ash processing facility located at NIPSCO – Schahfer Station. The facility will condition Class C and Class F fly ash to 20% moisture content from three NIPSCO facilities: Schahfer Station, Bailey Station, and Michigan City Station. The process will include pneumatic conveyance of unprocessed and processed fly ash, a silo for storage of fly ash prior to moisture conditioning, a baghouse for proper operation of the storage silo and pneumatic conveyance system, an enclosed pugmill for moisture conditioning the fly ash, and loading and unloading of processed fly ash.

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

(a) One (1) fly ash processing facility, permitted to be constructed in 2006, consisting of the following:

(1) One (1) pneumatic conveyor system, identified as PC-1 with a maximum transfer capacity of 25 tons of pre-conditioned fly ash per hour from each of the NIPSCO, Schahfer Station, Units 17 and 18, to the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(2) One (1) pneumatic truck unloading system, identified as PT-1, with a maximum transfer capacity of 25 tons of pre-conditioned fly ash (from NIPSCO facilities) per hour from each pneumatic truck to one (1) of four (4) unloading ports at the fly ash storage silo, FAS-1. Particulate emissions from transfer of the fly ash from the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(3) One (1) fly ash storage silo, identified as FAS-1, with a maximum storage capacity of 2,500 tons of fly ash, using one (1) baghouse, identified as HRI-1, for separation of fly ash and conveying air. Particulate emissions from transfer of the fly ash from the pneumatic conveyor system, PC-1, and the pneumatic truck unloading system, PT-1, to the fly ash storage silo, FAS-1, are controlled by one (1) baghouse, identified as HRI-1.

(4) Two (2) enclosed pugmills, identified as PM-1 and PM-2, each with a maximum processing capacity of 150 tons of fly ash per hour. Particulate emissions are minimized by equipment enclosure and moisture addition.

(5) One (1) radial conveyor system, identified as C-1 and RS-1, with a maximum transfer capacity of 300 tons of processed fly ash per hour from the two pugmills, PM-1 and PM-2, to storage piles. Particulate emissions are minimized by moisture addition.

“Integral Part of the Process” Determination

The Permittee has submitted the following information to justify why the baghouse should be considered an integral part of the fly ash processing facility:

(a) The baghouse is necessary to separate the process air from the product. Headwaters is paid per ton of fly ash that exits Headwaters’ system, and therefore, Headwaters has financial motivation to ensure that no fly ash escapes from any of the conveyance system or transfer points. Any fly ash lost during the transportation of the fly ash from NIPSCO to the Headwaters operation results in a financial loss to Headwaters. Therefore, the baghouse is necessary to guarantee that the greatest amount of fly ash is captured and processed so that Headwaters has the greatest earning potential.

(b) The amount of ash that Headwaters processes will be determined by weighing the amount of ash that exits Headwaters’ building prior to loading for disposal. A daily moisture check will determine the amount of moisture in the conditioned fly ash and then the amount of water added will be subtracted to determine the amount of fly ash processed by Headwaters.

(c) In an internal IDEM, OAQ memo from Paul Dubenetzky to the Permits Branch, Office of Air Management, dated March 11, 1999, air/product separation in pneumatic conveying is specifically discussed as a process that cannot operate without the control equipment. As Headwaters considers the fly ash from NIPSCO a product due to the manner in which Headwaters is paid by NIPSCO to process the fly ash, the baghouse should be considered integral to the process.

IDEM, OAQ has evaluated the information submitted and has determined that the baghouse should not be considered an integral part of the fly ash processing facility. This determination is based on the fact that:

(a) Pneumatic conveyance systems do require containment of the conveyed material for proper operation. However, this alone does not guarantee that the system is properly operated and maintained to prevent leaks.

(b) The powdery consistency of fly ash could allow much of any material released from an elevated baghouse to remain airborne long enough to be carried offsite. Material that reached the ground onsite could be dispersed over a wide area and would be impractical to clean up, and re-entrainment would be likely to occur.

(c) Avoidance of a disposal cost is not income and does not provide financial motivation to ensure that no fly ash escapes from any of the conveyance systems or transfer points. Avoiding possible cleanup of a wind-dispersed material with no monetary value is also not believed to be sufficient motivation to ensure proper operation and maintenance of the baghouse.

Therefore, the permitting level will be determined using the potential to emit before the baghouse.

Insignificant and Trivial Activities

The Headwaters Resources facility will consist of the following insignificant activities:

(1) The following VOC and HAP storage containers:

Vessels storing the following:

(a) Lubricating oils.

(b) Hydraulic oils.

(c) Machining oils.

(d) Machining fluids.

(3) Production related activities, including the following:

(A) Application of:

(a) oils;

(b) greases;

(c) lubricants; and

(d) nonvolatile material;

as temporary protective coatings.

(B) The following equipment related to manufacturing activities not resulting in the emission of HAPs:

(a) Brazing.

(b) Cutting torches.

(c) Soldering.

(d) Welding.

(C) Closed loop heating and cooling systems.

(4) Repair activities, including the following replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(5) Paved and unpaved roads and parking lots with public access.

(6) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per actual cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following:

(A) Deburring.

(B) Buffing.

(C) Polishing.

(D) Abrasive blasting.

(E) Pneumatic conveying.

(F) Woodworking operations.

(7) Purge double block and bleed valves.

(8) Emissions from a laboratory as defined in 326 IAC 2-7-1(21)(D).

The Headwaters Resources facility will consist of the following trivial activities:

(1) Water related activities, including the following production of hot water for on-site personal use not related to any industrial or production process.

(2) Activities related to ventilation, venting equipment, and refrigeration, including the following:

(i) Stack and vents from plumbing traps used to prevent the discharge of sewer gases, handling domestic sewage only, excluding those at wastewater treatment plants or those handling any industrial waste.

(ii) Air vents from air compressors.

(3) Activities related to routine fabrication, maintenance, and repair of buildings, structures, equipment, or vehicles at the source where air emissions from those activities would not be associated with any commercial production process, including the following:

(i) Activities associated with the repair and maintenance of paved and unpaved roads, including paving or sealing, or both, of parking lots and roadways.

(ii) Painting, including interior and exterior painting of buildings, and solvent use excluding degreasing operations utilizing halogenated organic solvents.

(iii) Brazing, soldering, or welding operations and associated equipment.

(iv) Batteries and battery charging stations except at battery manufacturing plants.

(v) Lubrication, including the following:

(AA) Hand-held spray can lubrication.

(BB) Dipping metal parts into lubricating oil.

(CC) Manual or automated addition of cutting oil in machining operations.

(vi) Instrument air dryer and filter maintenance.

(4) Activities performed using hand-held equipment, including the following:

(i) Cutting, excluding cutting torches.

(ii) Drilling.

(iii) Grinding.

(iv) Sanding.

(v) Sawing.

(5) Housekeeping and janitorial activities and supplies, including the following:

(i) Vacuum cleaning systems used exclusively for housekeeping or custodial activities, or both.

(ii) Rest rooms and associated cleanup operations and supplies.

(iii) Pest control fumigation.

(6) Office related activities, including the following:

(i) Office supplies and equipment.

(ii) Photocopying equipment and associated supplies.

(iii) Paper shredding.

(7) Storage equipment and activities, including the following:

(i) Pressurized storage tanks and associated piping for acetylene.

(ii) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.

(iii) Storage of drums containing maintenance raw materials.

(iv) Portable containers used for the collection, storage, or disposal of materials provided the container capacity is equal to or less than forty-six hundredths (0.46) cubic meters and the container is closed, except when the material is added or removed.

(8) Emergency and standby equipment, including the following:

(i) Safety and emergency equipment except engine driven fire pumps, including fire suppression systems and emergency road flares.

(ii) Activities and equipment associated with on-site medical care not otherwise specifically regulated.

(iii) Vacuum-producing devices for the purpose of removing potential accidental releases.

(9) Sampling and testing equipment and activities, including equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.

(10) Use of consumer products and equipment where the product or equipment is used at a source in the same manner as normal consumer use and is not associated with any production process.

(11) Activities generating limited amounts of fugitive dust, including fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes under subdivision (22)(B), and any required fugitive dust control plan or its equivalent is submitted.

(12) Activities associated with production, including the following:

(i) Electrical resistance welding.

(ii) Air compressors and pneumatically operated equipment, including hand tools.

(iii) Compressor or pump lubrication and seal oil systems.

(13) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities, including the following:

(i) Electric or steam heated drying ovens and autoclaves, including only the heating emissions and not any associated process emissions.

(ii) Manual loading and unloading operations.

(iii) Mechanical equipment gear boxes and vents that are isolated from process materials.

Enforcement Issues

There are no pending enforcement actions for the proposed new source construction.

Stack Summary

There will be no stacks installed as part of the proposed new source construction.

Emission Calculations

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

Permit Level Determination – Part 70

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

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Table 2: PTE Before Controls of the Modification

Pollutant	**Potential To Emit** (ton/yr)
PM	473.21
PM_{10}	165.02
SO_2	0.00
VOC	0.00
CO	0.00
NO_X	0.00
HAPs	0.00

This source modification is subject to 326 IAC 2-7-10.5(f)(4)(A) because the potential emit particulate matter (PM) is greater than twenty-five (25) tons per year before controls. In lieu of a significant permit modification, an initial Part 70 Operating Permit will be issued for Headwaters Resources, Inc., solely for administrative purposes.

Permit Level Determination – PSD or Emission Offset

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

	Table 3: Limited Potential to Emit (ton/yr)					
Process / Emission Unit	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**
Fly Ash Processing Process emissions	4.71	8.25	0.00	0.00	0.00	0.00
Unpaved Roads Fugitive Emissions	1.88	0.014	0.00	0.00	0.00	0.00
Storage Pile Fugitive Emissions	0.33	0.007	0.00	0.00	0.00	0.00
Total for Modification	6.92	8.27	0.00	0.00	0.00	0.00
Significant Level	25	15	NA	NA	NA	NA

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed source modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed source modification.

(c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following tables are used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

Table 4: CAM Applicability Analysis – PM							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Fly Ash Processing Process emissions	Y (BH)	Y	471	4.71	100	Y	N
Unpaved Roads Fugitive Emissions	N	N	1.88	1.88	100	N	NA
Storage Pile Fugitive Emissions	N	Y	0.33	0.33	100	N	NA

Table 5: CAM Applicability Analysis – PM_{10}							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Fly Ash Processing Process emissions	Y (BH)	Y	165	8.25	100	Y	N
Unpaved Roads Fugitive Emissions	N	N	0.014	0.014	100	N	NA
Storage Pile Fugitive Emissions	N	Y	0.007	0.007	100	N	NA

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to the fly ash processing facility for PM and PM_{10}. Because the the new unit is not a "large unit", as defined in 40 CFR 64.5, the CAM plan must be submitted as part of the Title V Renewal application.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs))
The operation of the fly ash processing facility will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting), because it is collocated with NIPSCO – Schahfer Station, which has the potential to emit more than one hundred (100) tons per year of SO_2, NO_X, CO, VOC, and PM_{10}. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3(a) and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period identified in 326 IAC 2-6.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates have been established as follows:

Emission Unit	Control Device	Process Weight Rate, **P** (ton/hr)	Emission Rate, **E** (lb/hr)
Pneumatic Conveyor System, PC-1	Baghouse, HRI-1	50	44.58
Pneumatic Truck Unloading System, PT-1	Baghouse, HRI-1	100	51.28
Fly Ash Storage Silo, FAS-1	Baghouse, HRI-1	300	63.00
Pugmill, PM-1	Enclosure, Moisture Addition	150	55.44
Pugmill, PM-2	Enclosure, Moisture Addition	150	55.44
Radial Conveyor System, C-1 and RS-1	Moisture Addition	300	63.00

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

326 IAC 6-4-2 (Fugitive Dust Emission Limitations)
Pursuant to 326 IAC 6-4-2:

(a) Any fly ash storage pile generating fugitive dust shall be in violation of this rule (326 IAC 6-4) if any of the following criteria are violated:

(1) A source or combination of sources which cause to exist fugitive dust concentrations greater than sixty-seven percent (67%) in excess of ambient upwind concentrations as determined by the following formula:

$$P = \frac{100\ (R - U)}{U}$$

Where
P = Percentage increase
R = Number of particles of fugitive dust measured at downward receptor site
U = Number of particles of fugitive dust measured at upwind or background site

(2) The fugitive dust is comprised of fifty percent (50%) or more respirable dust, then the percent increase of dust concentration in subdivision (1) of this section shall be modified as follows:

$$P_R = (1.5\ N)\ P$$

Where
N = Fraction of fugitive dust that is respirable dust;
P_R = allowable percentage increase in dust concentration above background; and
P = no value greater than sixty-seven percent (67%).

(3) The ground level ambient air concentrations exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(4) If fugitive dust is visible crossing the boundary or property line of a source. This subdivision may be refuted by factual data expressed in subdivisions (1), (2) or (3) of this section. 326 IAC 6-4-2(4) is not federally enforceable.

(b) Pursuant to 326 IAC 6-4-6(6) (Exceptions), fugitive dust from a source caused by adverse meteorological conditions will be considered an exception to this rule (326 IAC 6-4) and therefore not in violation.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance Determination Requirements
The Compliance Determination Requirements applicable to the fly ash processing facility are as follows:

(a) Testing Requirements
Within 180 days after startup of the fly ash processing facility, compliance with the particulate emission limitations in Conditions D.1.1, PM and PM_{10} PSD Minor Limits, and D.1.2, Particulate Emission Limitation, shall be determined by a performance stack test. Testing shall be repeated every two (2) years.

(b) Emission Controls Operation
The baghouse, HRI-1, for particulate emissions control shall be in operation and control particulate emissions whenever pre-conditioned fly ash from the pneumatic conveyor system, PC-1, and/or the pneumatic truck unloading system, PT-1, is being transferred to the fly ash storage silo, FAS-1.

These requirements are required to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and to render 326 IAC 2-2 (PSD) not applicable.

Compliance Monitoring Requirements
The compliance monitoring requirements applicable to fly ash processing facility are as follows:

(a) Visible Emissions Notations
The Permittee shall perform daily visible emission notations of the:

(1) Baghouse, HRI-1, exhaust, and

(2) Processed Fly Ash Storage Pile.

(b) Baghouse Parametric Monitoring
The Permittee shall record the pressure drop across the baghouse, HRI-1, at least once per day when pre-conditioned fly ash from the pneumatic conveyor system, PC-1, and/or the pneumatic truck unloading system, PT-1, is being transferred to the fly ash storage silo, FAS-1.

(c) Broken or Failed Bag Detection
The Permittee shall maintain the baghouse and replace broken or failed bags as needed.

These monitoring conditions are necessary because the baghouse for the fly ash processing facility must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70)).

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 073-23711-00040 and Part 70 Operating Permit No. 073-23909-00040. The staff recommend to the Commissioner that this Part 70 Significant Source and Part 70 Operating Permit be approved.

Indiana Department of Environmental Management
Office of Air Quality

Appendix A: Emission Calculations
Technical Support Document (TSD)

Company Name:	Headwaters Resources, Inc.
Address City IN Zip:	2723 East, 1500 North, Wheatfield, IN 46392
County:	Jasper
SIC Code:	4911, 3295
Part 70 Operating Permit Number:	073-23909-00040
Source Modification Number:	073-23711-00040
Permit Reviewer:	Kim Cottrell
Date:	January 8, 2007

Fly Ash Pneumatic Transport System

Maximum Throughputs:	lb/hr	ton/hr	ton/yr
From Schahfer Units 17 & 18 (Class F):	100,000	50	438,000
From Pneumatic Truck Loading (Class C):	200,000	100	876,000
Total Throughput to Silo:	*300,000*	*150*	*1,314,000*

Maximum Capacity of Silo:	1,700	ton Class F fly ash (density = 60 lb/ft^3)
	2,500	ton Class C fly ash (density = 85 lb/ft^3)
Maximum Capacity of the 2 Pugmills:	300	ton/hr processed fly ash
	300,000	ton/yr processed fly ash

Pollutant (P)	Emission Factor (lb P/ton fly ash)	Uncontrolled PTE (ton/yr)	Uncontrolled PTE (lb/hr)	Controlled PTE (ton/yr)	Controlled PTE (lb/hr)
PM	3.14	471.00	107.53	4.71	1.08
PM_{10}	1.10	165.00	37.67	8.25	1.88

Calculation Methodology

Emission factors for fly ash Before Control from AP-42 Table 11.12-2 (Emission Factors for Concrete Batching) (October 2001 edition) - pneumatic conveyance of cement supplement (including fly ash) to silo.

Uncontrolled PTE (ton/yr) = Emission Factor (lb Pollutant / ton fly ash) x Maximum Throughput (ton/yr fly ash) / 2000 lb/ton
Uncontrolled PTE (lb/hr) = Uncontrolled PTE (ton/yr) x 2000 lb/ton / 8760 hr/yr
Controlled PTE (ton/yr) = Uncontrolled PTE (ton/yr) x (1 - Control Efficiency)
Controlled PTE (lb/hr) = Controlled PTE (ton/yr) x 2000 lb/ton / 8760 hr/yr

Particulate Emissions are controlled by a baghouse.
Control Efficiency PM = 99%
Control Efficiency PM_{10} = 95%

Fugitive Emissions from Unpaved Roads

4	trip/hr x		
0.114	mile/trip x		
2	(round trip) x		
8760	hr/yr =	7989.12	miles per year

PM

Method:	Ef =	{k * [(s/12)^0.8] * [(W/3)^b] / [(Mdry/0.2)^c]} * [(365-p) / 365]	
	=	0.47	lb/mile
where:	k =	10	(particulate size multiplier for PM) (k = 10 for PM-30 or TSP)
	s =	4.80%	mean % silt content of unpaved roads
	b =	0.5	Constant for PM (b = 0.5 for PM-30 or TSP)
	c =	0.4	Constant for PM (c = 0.4 for PM-30 or TSP)
	W =	49	tons average vehicle weight
	Mdry =	6.50%	surface material moisture content, %
	p =	140	no. of days with at least 0.254 mm of precipitation (see Fig. 13.2.2-1)

0.47 lb/mi *	7989.12	mi/yr =	**1.88**	**ton/yr**

PM_{10}

Method:	Ef =	{k * [(s/12)^0.8] * [(W/3)^b] / [(Mdry/0.2)^c]} * [(365-p) / 365]	
	=	0.08	lb/mile
where:	k =	2.6	(particule size multiplier for PM-10) (k = 10 for PM-30 or TSP)
	s =	4.80%	mean % silt content of unpaved roads
	b =	0.4	Constant for PM-10 (b = 0.5 for PM-30 or TSP)
	c =	0.3	Constant for PM-10 (c = 0.4 for PM-30 or TSP)
	W =	49	tons average vehicle weight
	Mdry =	6.50%	surface material moisture content, %
	p =	140	no. of days with at least 0.254mm of precipitation (see Fig. 13.2.2-1)

0.08 lb/mi *	7989.12	mi/yr =	**0.33**	**ton/yr**

Methodology:
The amount of emissions created by unpaved roads are based on 8760 hours per year [AP-42, Ch. 13.2.2 (Supplement E, 9/98)]

Fugitive Emissions from Storage Piles

EF (lb/ton) = k * (0.0032) * (U/5)^1.3 / (M/2)^1.4 AP42 13.2.4, Equation 1 (lb/ton transferred)

where:

k value for:

PM	PM_{10}
0.74	0.35

U value =	5	mph	(mean windspeed)
M value =	20	%	(material moisture content provided by Headwaters)
Annual Storage Throughput	300000	tons/yr	

PM EF =	9.43E-05	lb/ton
PM_{10} EF =	4.46E-05	lb/ton

PM Emissions (ton/yr) = EF (lb/ton) * Usage rate (ton/year transferred) * 1/2000 ton/lb

PM Emissions (ton/yr) = 0.014

PM_{10} Emissions (ton/yr) = EF (lb/ton) * Usage rate (ton/year transferred) * 1/2000 ton/lb

PM_{10} Emissions (ton/yr) = 0.007

Notes:

The section that discusses storage piles, AP-42 Section 13.2.4, indicates that the largest contribution to emissions from the storage pile is the loading into the pile. An equation for the storage pile was not available. Therefore, it is assumed that the emissions from the storage pile is equal to the emissions from the storage pile handling.

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		Process Weight, P		P>60,000 lb/hr
		each unit	each unit	E = 55 P^0.11 - 40
PM Control Device	**Emission Units**	P (lb/hr)	P (ton/hr)	E (lb/hr)
NA	PC-1	100,000	50	**44.58**
NA	C-1	600,000	300	**63.00**
NA	PT-1	200,000	100	**51.28**
NA	PM-1	300,000	150	**55.44**
NA	PM-2	300,000	150	**55.44**
Baghouse HRI-1	FAS-1 *	600,000	300	**63.00**

* Although the maximum storage capacity of the silo is 2,500 tons of fly ash, the maximum processing cacity is limited by the rate the pugmills are processing the fly ash.

Emissions Summary

	PM PTE			
Process	**Uncontrolled PTE** (ton/yr)	**Uncontrolled PTE** (lb/hr)	**Controlled PTE** (ton/yr)	**Controlled PTE** (lb/hr)
Fly Ash Pneumatic Transport System	471.00	107.53	4.71	1.08
Fugitive Emissions from Unpaved Roads	1.88	0.43	1.88	0.43
Fugitive Emissions from Storage Piles	0.33	0.08	0.33	0.08
Totals:	**473.21**	**108.04**	**6.92**	**1.58**

	PM_{10} PTE			
Process	**Uncontrolled PTE** (ton/yr)	**Uncontrolled PTE** (lb/hr)	**Controlled PTE** (ton/yr)	**Controlled PTE** (lb/hr)
Fly Ash Pneumatic Transport System	165.00	37.67	8.25	1.88
Fugitive Emissions from Unpaved Roads	0.014	0.00	0.01	0.00
Fugitive Emissions from Storage Piles	0.007	0.00	0.01	0.00
Totals:	**165.02**	**37.68**	**8.27**	**1.89**