INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: June 05, 2006

RE: BP Products NA / 089-22706-00453

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-MOD.dot 03/23/06

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June 05, 2006

Ms. Amy Gannon
BP Products North America, Inc. Whiting Business Unit
P.O. Box 710
Whiting, Indiana 46394

Re: 089-22706-00453
First Significant Permit Modification to
MSM No.: 089-21682-00453

Dear Ms. Gannon:

BP Products North America, Inc. Whiting Business Unit was issued a permit on December 20, 2005 for two (2) oxidizers (identified as BLTF and ITF oxidizers) for the site remediation systems. A letter requesting changes to this permit was received on February 22, 2006. Pursuant to 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

This modification incorporates an alternative monitoring plan for the BLTF and ITF thermal oxidizers used to control emissions from BP's onsite groundwater remediation systems. This alternative monitoring plan replaces the continuous emission monitoring system (CEMs) required by 40 CFR Part 60, Subpart J – Standards of Performance for Petroleum Refineries (326 IAC 12) and was approved by the U.S. EPA in a letter dated January 9, 2006.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027 and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Nisha Sizemore

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments
ERG/AAB

cc: File – Lake County
U.S. EPA, Region V
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector – Mr. Ramesh Tejuja
Compliance Data Section
Administrative and Development
Technical Support and Modeling

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PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR QUALITY

BP Products North America Inc., Whiting Business Unit
2815 Indianapolis Blvd.
Whiting, Indiana 46394

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

This approval 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.

Minor Source Modification No. 089-21682-00453	
Issued by: Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: December 20, 2005

First Significant Permit Modification No. 089-22706-00453 Affected Pages: 14-16	
Issued by: Nisha Sizemore Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: June 05, 2006

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval 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 refinery, marketing terminal and chemical plant.

Responsible Official:	Whiting Business Unit Leader
Source Address:	2815 Indianapolis Blvd, Whiting, Indiana 46394
Mailing Address:	P.O. Box 710, Whiting, Indiana 46394
General Source Phone Number:	219-473-3179
SIC Code:	2911
County Location:	Lake
Source Location Status:	Nonattainment for SO_2 and ozone under the 1-hour and 8-hour ozone standards Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD, and Emission Offset Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

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

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) thermal oxidizer (identified as the BLTF Oxidizer), constructed in 2006, and used to control VOC and HAP emissions from the J-161 vacuum pump vent in the Berry Lake Tank Field Remediation System. The BLTF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

(b) One (1) thermal oxidizer (identified as the ITF Oxidizer), constructed in 2006, and used to control VOC and HAP emissions from the D-138 vapor/liquid separation tank, and the J-138, J-139, and J-140 well point systems in the Indiana Tank Field Remediation System. The ITF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

A.3 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 CONSTRUCTION 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 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

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

B.4 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60, Subpart J, the Permittee is hereby advised of the requirement to report the following at the appropriate times:

(a) Commencement of construction date (no later than 30 days after such date);

(b) Actual start-up date (within 15 days after such date); and

(c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204-2251

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

B.5 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 GENERAL OPERATION CONDITIONS

C.1 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 a 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) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 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) The Permittee shall prepare and maintain a Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, for the source as described in 326 IAC 1-6-3. At a minimum, the PMP shall include:

(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.

(b) A copy of the PMP 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 PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does 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.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(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
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)]

C.4 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 twenty percent (20%) 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.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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Dust Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan included in Appendix A, submitted on December 11, 1993 and revised May 28, 2004.

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

C.7 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, 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 approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 source 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.8 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. 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.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 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.11 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.12 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 the 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:

(1) monitoring results;

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

(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.13 Emergency Provisions [326 IAC 2-7-16]

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

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

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

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

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

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

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

Northwest Regional Office
Telephone Number: 219-757-0265
Facsimile Number: 219-757-0267

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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.

C.14 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 and 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.15 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 reasonable possibility that a "project" (as defined in 326 IAC 2-2-1(qq) and 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a Clean Unit, which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and 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 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 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 326 IAC 2-3-1(mm)(2)(A)(3); 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.16 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
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 326 IAC 2-3-1(ll)) at an existing emissions 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 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 required by paragraph (f) of this condition for a project at an existing emissions 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 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
Indianapolis, Indiana 46204-2251

(h) 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.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) thermal oxidizer (identified as the BLTF Oxidizer), constructed in 2006, and used to control VOC and HAP emissions from the J-161 vacuum pump vent in the Berry Lake Tank Field Remediation System. The BLTF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

(b) One (1) thermal oxidizer (identified as the ITF Oxidizer), constructed in 2006, and used to control VOC and HAP emissions from the D-138 vapor/liquid separation tank, and the J-138, J-139, and J-140 well point systems in the Indiana Tank Field Remediation System. The ITF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

(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.1.1 Particulate Matter [326 IAC 6.8-1-2]

Pursuant to 326 IAC 6.8-1-2(a) (formerly 326 IAC 6-1-2(a)) (Particulate Matter Limitations for Lake County), particulate matter (PM) emissions from the two thermal oxidizers shall not exceed 0.03 gr/dscf.

D.1.2 New Source Performance Standards [326 IAC 12][40 CFR 60, Subpart J]

(a) Pursuant to 40 CFR 60, Subpart J, the Permittee shall comply with the requirements specified in Section E.1 for the BLTF and ITF thermal oxidizers, except as outlined in the Alternative Monitoring Plan (AMP) incorporated in paragraphs (b) through (e) of this condition.

(b) To demonstrate compliance with paragraph (a) of this condition and as approved by the U.S. EPA on January 9, 2006, the Permittee shall comply with the following alternative compliance requirements for the BLTF and ITF thermal oxidizers:

(1) Upon startup of the ITF Thermal Oxidizer, the Permittee shall conduct initial sampling. The sampling shall consist of monitoring the H_2S content of the combined fuel gas stream prior to the thermal oxidizer once per day for fourteen (14) days. The results of the initial sampling shall be submitted to the U.S. EPA and IDEM, OAQ within fourteen (14) days of completion. The terms and conditions of this AMP may be revised based on the initial sampling data.

(2) The Permittee shall conduct random detector tube sampling at each AMP monitoring location twice per week for a period of six (6) months for a total of fifty-two (52) samples. If the calculated range and variability of the data set is less than 81 ppm H_2S, the Permittee shall comply with the requirements in paragraph (b)(3) of this condition. The Permittee shall submit all test data, including raw measurements and calculated average and variability to the U.S. EPA and IDEM, OAQ within thirty (30) days of the end of each calendar quarter.

(3) The Permittee shall conduct random detector tube sampling at each AMP monitoring location monthly for a period of two calendar quarters. Sampling shall occur randomly each month with a minimum of two (2) weeks between samples. If the calculated range and variability of the data set is less than 81 ppm H_2S, then the Permittee shall comply with the requirements in paragraph (b)(4). The Permittee shall submit all test data, including raw measurements and calculated average and variability, to the U.S. EPA and IDEM, OAQ within thirty (30) days of

the end of each calendar quarter.

(4) The Permittee shall continue to conduct testing on a monthly basis at each AMP monitoring location. Testing is to occur randomly once every month with a minimum of two (2) weeks between samples. If any one sample is equal to or greater than 81 ppm H_2S, then the Permittee shall comply with the requirements specified in paragraph (b)(5) of this condition for the affected thermal oxidizer. The Permittee shall submit all test data, including raw measurements, in the periodic report to the U.S. EPA and IDEM, OAQ within thirty (30) days of the end of each semi-annual period.

(5) If, at any time, a single detector tube sample value is equal to or greater than 81 ppm H_2S, the Permittee shall conduct detector tube sampling at the AMP monitoring location on a daily basis for seven (7) days. If the average detector tube result plus three (3) standard deviations for the seven (7) samples is less than 81 ppm H_2S, the Permittee shall submit the date and value of the monitoring event that triggered the additional sampling and the seven (7) day H_2S sample results in a written report submitted within thirty (30) days of the conclusion of the seven (7) day sampling. If the average plus three (3) standard deviations for the seven (7) samples is equal to or greater than 81 ppm H_2S, the Permittee shall comply with the requirements in paragraph (b)(6) of this condition. If the average plus three (3) standard deviations is less than 81 ppm H_2S, the Permittee shall resume the monitoring and reporting in accordance with the monitoring or reporting schedule listed in paragraphs (b)(1) through (4) that resulted in a sample greater than 81 ppm H_2S.

(6) If any sample detector tube data set indicates a potential for the emission limit to be exceeded, as outlined in paragraphs (e) or (b)(5) of this condition, the Permittee shall notify the U.S. EPA and IDEM, OAQ of those results before the end of the next business day following the last day of sample collection. The affected fuel gas stream shall subsequently be tested daily for a two (2) week period. After the two (2) week period is complete, sampling will continue once per week, or until the U.S. EPA approves a revised sampling schedule or makes a determination to withdraw approval of the gas stream/system from the AMP.

(c) The H_2S testing required by paragraph (b) of this condition shall be conducted using detector tubes – length of stain tube-type measurement. The detector tubes used for routine testing shall have a range of 0-10/0-100 ppm (N=10/1). Detector tubes with a range of 0-500 ppm shall be used for testing if the measured concentration exceeds 100 ppm H_2S.

(d) The monitoring location for the ITF and BLTF Thermal Oxidizers shall be on the fuel gas stream just prior to the thermal oxidizer. Specifically, for the ITF Thermal Oxidizer, the AMP monitoring location shall be after the vapors/gases from the well points J-138, J-139, and J-140 and the vapors from Tank D-138 combine. There shall not be vapors/gases added to the fuel stream after the AMP monitoring location.

(e) Data Range and Variability Calculation and Acceptance Criteria for the AMP: For paragraphs (b)(1) through (6) of this condition, sample range and variability shall be determined by calculating the average plus three (3) standard deviations for that test data set. If the average plus three (3) standard deviations for the test data set is less than 81 ppm H_2S, the sample range and variability are acceptable and the Permittee shall proceed to the next step of the monitoring schedule listed in paragraph (b) of this condition. If the data shows an unacceptable range and variability, the Permittee shall comply with the requirements in paragraph (b)(6) of this condition. If at any time, one detector tube sample is equal to or greater 81 ppm H_2S, the Permittee shall comply with the requirements in paragraph (b)(5).

D.1.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC

20-1-1, apply to the BLTF and ITF thermal oxidizers used to control emissions from the site remediation systems, as designated by 40 CFR 63.7882(a), except when otherwise specified in 40 CFR 63 Subpart GGGGG. The Permittee must comply with the requirements of 40 CFR 63, Subpart A on and after October 9, 2003.

D.1.4 National Emissions Standards for Hazardous Air Pollutants for Site Remediation [40 CFR Part 63, Subpart GGGGG]

(a) The BLTF and ITF thermal oxidizers used to control the emissions from the site remediation systems (including process vents, remediation material management units, and equipment components) are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Site Remediation, (40 CFR 63, Subpart GGGGG), effective October 8, 2003. Pursuant to this rule, the Permittee must comply with 40 CFR 63, Subpart GGGGG on and after October 9, 2006.

(b) The definitions in 40 CFR 63, Subpart GGGGG, Section 63.7957 are applicable to the Permittee.

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

D.1.5 Requirement to Submit a Significant Permit Modification Application [326 IAC 2-7-12][326 IAC 2-7-5]

The Permittee shall submit an application for a significant permit modification to IDEM, OAQ to include information regarding which compliance option or options will be chosen.

(a) The significant permit modification application shall be consistent with 326 IAC 2-7-12, including information sufficient for IDEM, OAQ to incorporate into the Title V permit the applicable requirements of 40 CFR 63, Subpart GGGGG, a description of the affected source and activities subject to the standard, and a description of how the Permittee will meet the applicable requirements of the standard.

(b) The significant permit modification application shall be submitted no later than the 60th day following the completion of the performance test and/or initial compliance demonstrations according to 40 CFR 63.10(d)(2).

(c) The significant permit modification application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue,
Indianapolis, Indiana 46206-2251

SECTION E.1 40 CFR 60, Subpart J – Standards of Performance for Petroleum Refineries

E.1.1 General Provisions Relating to NSPS [326 IAC 12] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the BLTF and ITF thermal oxidizers, except when otherwise specified in 40 CFR 60, Subpart J.

E.1.2 NSPS Subpart J Requirements [40 CFR Part 60, Subpart J] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart J, the Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart J, which are incorporated by reference as 326 IAC 12:

§ 60.104 Standards for sulfur oxides.

Each owner or operator that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after initial startup, whichever comes first.

(a) No owner or operator subject to the provisions of this subpart shall:

(1) Burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph.

§ 60.105 Monitoring of emissions and operations.

(a) Continuous monitoring systems shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this subpart as follows:

(3) For fuel gas combustion devices subject to §60.104(a)(1), an instrument for continuously monitoring and recording the concentration by volume (dry basis, zero percent excess air) of SO_2 emissions into the atmosphere (except where an H_2S monitor is installed under paragraph (a)(4) of this section). The monitor shall include an oxygen monitor for correcting the data for excess air.

(i) The span values for this monitor are 50 ppm SO_2 and 25 percent oxygen (O_2).

(ii) The SO_2 monitoring level equivalent to the H_2S standard under §60.104(a)(1) shall be 20 ppm (dry basis, zero percent excess air).

(iii) The performance evaluations for this SO_2 monitor under §60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations. Method 6 samples shall be taken at a flow rate of approximately 2 liters/min for at least 30 minutes. The relative accuracy limit shall be 20 percent or 4 ppm, whichever is greater, and the calibration drift limit shall be 5 percent of the established span value.

(iv) Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location (i.e., after one of the combustion devices), if monitoring at this location accurately represents the S_2 emissions into the atmosphere from each of the combustion devices.

(4) In place of the SO_2 monitor in paragraph (a)(3) of this section, an instrument for continuously monitoring and recording the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

(i) The span value for this instrument is 425 mg/dscm H_2S.

(ii) Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

(iii) The performance evaluations for this H_2S monitor under §60.13(c) shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

(e) For the purpose of reports under §60.7(c), periods of excess emissions that shall be determined and reported are defined as follows:

Note: All averages, except for opacity, shall be determined as the arithmetic average of the applicable 1-hour averages, e.g., the rolling 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages.

(3) *Sulfur dioxide from fuel gas combustion.* (i) All rolling 3-hour periods during which the average concentration of SO_2 as measured by the SO_2 continuous monitoring system under §60.105(a)(3) exceeds 20 ppm (dry basis, zero percent excess air); or

(ii) All rolling 3-hour periods during which the average concentration of H_2S as measured by the H_2S continuous monitoring system under §60.105(a)(4) exceeds 230 mg/dscm (0.10 gr/dscf).

§ 60.106 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(e)(1) The owner or operator shall determine compliance with the H_2S standard in §60.104(a)(1) as follows: Method 11, 15, 15A, or 16 shall be used to determine the H_2S concentration. The gases entering the sampling train should be at about atmospheric pressure. If the pressure in the refinery fuel gas lines is relatively high, a flow control valve may be used to reduce the pressure. If the line pressure is high enough to operate the sampling train without a vacuum pump, the pump may be eliminated from the sampling train. The sample shall be drawn from a point near the centroid of the fuel gas line.

(i) For Method 11, the sampling time and sample volume shall be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times shall be taken at about 1-hour intervals. The arithmetic average of these two samples shall constitute a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H_2S may necessitate sampling for longer periods of time.

(ii) For Method 15 or 16, at least three injects over a 1-hour period shall constitute a run.

(iii) For Method 15A, a 1-hour sample shall constitute a run.

(2) Where emissions are monitored by §60.105(a)(3), compliance with §60.105(a)(1) shall be determined using Method 6 or 6C and Method 3 or 3A. A 1-hour sample shall constitute a run. Method 6 samples shall be taken at a rate of approximately 2 liters/min. The ppm correction factor (Method 6) and the sampling location in paragraph (f)(1) of this section apply. Method 4 shall be used to determine the moisture content of the gases. The sampling point for Method 4 shall be adjacent to the sampling point for Method 6 or 6C.

§ 60.107 Reporting and recordkeeping requirements.

(d) For any periods for which sulfur dioxide or oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

(e) The owner or operator of an affected facility shall submit the reports required under this subpart to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.

(f) The owner or operator of the affected facility shall submit a signed statement certifying the accuracy and completeness of the information contained in the report.

§ 60.108 Performance test and compliance provisions.

(a) Section 60.8(d) shall apply to the initial performance test specified under paragraph (c) of this section, but not to the daily performance tests required thereafter as specified in §60.108(d). Section 60.8(f) does not apply when determining compliance with the standards specified under §60.104(b). Performance tests conducted for the purpose of determining compliance under §60.104(b) shall be conducted according to the applicable procedures specified under §60.106.

E.1.3 One Time Deadlines Relating to NSPS Subpart J

The Permittee shall comply with the following requirements by the dates listed below:

Requirement	Rule Citation	Affected Facility	Deadline
Notification of the date of construction commencement	40 CFR 60.7(a)(1)	BLTF and ITF Thermal Oxidizers	No later than 30 days after commencement of construction
Complete Performance Tests	40 CFR 60.8	BLTF and ITF Thermal Oxidizers	Within 60-days after achieving maximum production rate but not later than 180-days after initial startup
Notification of initial startup	40 CFR 60.7(a)(3)	BLTF and ITF Thermal Oxidizers	Within 15 days of startup
Notification of the date of demonstration of continuous monitoring system performance	40 CFR 60.7(a)(5)	BLTF and ITF Thermal Oxidizers	30-days prior to demonstration

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: BP Products North America, Inc., Whiting Business Unit
Source Address: 2815 Indianapolis Blvd, Whiting, Indiana 46394
Mailing Address: P.O. Box 710, Whiting, Indiana 46394
Source Modification No.: 089-21682-00453

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- ☐ 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:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: BP Products North America, Inc., Whiting Business Unit
Source Address: 2815 Indianapolis Blvd, Whiting, Indiana 46394
Mailing Address: P.O. Box 710, Whiting, Indiana 46394
Source Modification No.: 089-21682-00453

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**) working 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 **Page 2 of 2**

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:_____

A certification is not required for this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document
for a Significant Permit Modification to a Part 70 Minor Source Modification

Source Background and Description

Source Name:	BP Products North America Inc., Whiting Business Unit
Source Location:	2815 Indianapolis Boulevard, Whiting, Indiana 46394-0710
County:	Lake
SIC Code:	2911
Operation Permit No.:	T089-6741-00453
Operation Permit Issuance Date:	Not yet issued
Minor Source Modification No.:	089-21682-00453
Minot Source Modification Issuance Date:	12/20/05
Significant Permit Modification No.:	089-22706-00453
Permit Reviewer:	ERG/AAB

On April 4, 2006, the Office of Air Quality (OAQ) had a notice published in the The Post Tribune, Merrillville, Indiana, stating that BP Products North America Inc., Whiting Business Unit had applied for a Significant Permit Modification to a Part 70 Minor Source Modification relating to the incorporation of an alternative monitoring plan for the BLTF and ITF thermal oxidizers into the Minor Source Modification No. 089-21682-00453, issued December 20, 2005. 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.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). Conditions have been renumbered accordingly, and the Table of Contents has been modified to reflect these changes.

1. A statement was added to C.1 Certification in order to clarify that the certification form may cover more than one document that is submitted.

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

(a) . . .

(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.**

2. IDEM has decided to remove (d) concerning nonroad engines from C.3 Permit Amendment or Modification. 40 CFR 89, Appendix A specifically indicates that states are not precluded from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emission limits, or sulfur limits on fuel; nor are permits regulating such operations precluded, once the engine is no longer new.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

. . .

~~(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

3. Operation of equipment was listed two places in the permit. IDEM has decided that it is best to have this requirement under compliance determination in the specific D conditions; therefore, it has been deleted from the C Section.

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

~~Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation~~.

4. The IDEM's phone number and the fax number listed in Condition C.13 Emergency Provisions and on the Emergency Occurrence Report have been corrected

C.13 Emergency Provisions [326 IAC 2-7-16]

. . .

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 **0178** (ask for Compliance Section)
Facsimile Number: 317-233-5967 **6865**

. . .

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-~~5674~~ 0178
Fax: 317-233-~~5967~~ 6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: BP Products North America, Inc., Whiting Business Unit
Source Address: 2815 Indianapolis Blvd, Whiting, Indiana 46394
Mailing Address: P.O. Box 710, Whiting, Indiana 46394
Source Modification No.: 089-21682-00453

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-~~5674~~**0178**, ask for Compliance Section); and
The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-~~5967~~**6865**), and follow the other requirements of 326 IAC 2-7-16.

. . .

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	BP Products North America Inc., Whiting Business Unit
Source Location:	2815 Indianapolis Boulevard, Whiting, Indiana 46394-0710
County:	Lake
SIC Code:	2911
Operation Permit No.:	T089-6741-00453
Operation Permit Issuance Date:	Not yet issued
Minor Source Modification No.:	089-21682-00453
Minot Source Modification Issuance Date:	12/20/05
Significant Permit Modification No.:	089-22706-00453
Permit Reviewer:	ERG/AAB

The Office of Air Quality (OAQ) has reviewed a modification application from BP Products North America Inc. Whiting Business Unit (BP) relating to the incorporation of an alternative monitoring plan for the BLTF and ITF thermal oxidizers into the Minor Source Modification No. 089-21682-00453, issued December 20, 2005.

Permitted Emission Units and Pollution Control Equipment

There are no changes to the existing permitted emission units and pollution control equipment included in this Significant Permit Modification.

Insignificant Activities

There are no changes to the existing insignificant activities included in this Significant Permit Modification.

History

IDEM, OAQ drafted a Part 70 permit based on the application submitted by BP in September 1996 and additional information received from the source between 1996 and 2006. Issuance of the Part 70 permit is currently pending.

On December 20, 2005, BP was issued Minor Source Modification (MSM) No. 089-21682-00453 for the construction of two thermal oxidizers for use in controlling emissions from the site remediation systems. As stated in the MSM, the BLTF and ITF thermal oxidizers are subject to the requirements of 40 CFR Part 60, Subpart J - Standards for Performance for Petroleum Refineries (326 IAC 12) because they are located at a refinery and meet the definition of fuel gas combustion units. 40 CFR 63.105(a)(3) requires the sulfur dioxide emissions be monitored using a continuous emission monitor (CEM) unless an alternative monitoring plan has been approved by the U.S. EPA. Although BP submitted a request for approval of an alternative monitoring plan in October 2005, the plan was not approved by the U.S. EPA until three weeks after the MSM was issued. The purpose of this Significant Permit Modification is to incorporate the alternative monitoring plan into the MSM and delete the CEM requirement.

Source Definition

This stationary company consists of two (2) plants:

(a) The Whiting Refinery (previously designated 089-00003), located at 2815 Indianapolis Boulevard, Whiting, Indiana 46394; and

(b) The Marketing Terminal (previously designated 089-00004), located at 2530 Indianapolis Boulevard, Whiting, Indiana 46394.

Since the two (2) plants are located on contiguous or adjacent properties, are under the common control of the same entity, and the Whiting Refinery supports the Marketing Terminal they are currently considered one (1) source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that this Significant Permit Modification to the Part 70 Minor Source Modification 089-21682-00453, issued on December 20, 2005, be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 22, 2006.

Potential To Emit of Modification

This significant permit modification will not result in an increase in the potential emissions from this source.

Justification for Modification

This Significant Permit Modification to Minor Source Modification 089-21682-00453, issued on December 20, 2005, is being performed pursuant to 326 IAC 2-7-12(d)(1), because the incorporation of the U.S. EPA approved alternative monitoring plan for compliance with 40 CFR 60, Subpart J represents a significant change in the existing monitoring requirements.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM10	Maintenance Attainment
PM2.5	Nonattainment
SO_2	Primary Nonattainment
NO_2	Attainment
1-hr Ozone	Severe Nonattainment
8-hr Ozone	Moderate Nonattainment
CO	Maintenance Attainment
Lead	Attainment

(a) U.S.EPA in Federal Register Notice 70 FR 943 dated January 5, 2005 has designated Lake County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney

General's Office on behalf of IDEM filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of non-attainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for violation of the Clean Air Act, the OAQ is following the U.S. EPA's guidance to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone.

(1) On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NOx threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Lake County has been designated as nonattainment in Indiana for the 1-hour ozone standard. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

(2) VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.

(c) Lake County has been classified as attainment or unclassifiable in Indiana for PM10, NO_2, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section

(d) The portion of Lake County in which this source is located has been classified as nonattainment in Indiana for SO_2. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

(e) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive emissions of PM and VOC are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	> 100
PM10	> 100
PM2.5	> 100
SO_2	> 100
VOC	> 100
CO	> 100
NOx	> 100

(a) This existing source is a major stationary source under PSD because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is in one of the 28 listed source categories.

(b) This existing source is a major source under Emission Offset because PM2.5, VOC, NOx, and SO_2 are emitted at a rate of 100 tons per year or more.

(c) These emissions are based upon the 2003 emissions data submitted to IDEM by BP.

Federal Rule Applicability

As stated in MSM 089-21682-00453, issued on December 20, 2005, the BLTF and ITF thermal oxidizers are subject to the requirements of 40 CFR Part 60, Subpart J – Standards of Performance for Petroleum Refineries (326 IAC 12) because they are located at a refinery and meet the definition of a fuel gas combustion unit in 40 CFR 60.101. Under 40 CFR 63.105(a)(3), fuel gas combustion units subject to the sulfur oxides standard in 40 CFR 60.104(a)(1) must be equipped with a continuous emission monitor (CEM) to monitor and record the emissions of SO_2 unless an alternative monitoring plan has been approved by the U.S. EPA. BP submitted a request to the U.S. EPA on October 3, 2005 for approval of an alternative monitoring plan. The U.S. EPA approved BP's alternative monitoring plan in a letter dated January 9, 2006 from Mr. George Czerniak, U.S. EPA, Region 5 to Ms. Linda Wilson of BP Products North America, Inc. A copy of the approval letter is included in Appendix A of this document.

State Rule Applicability

There are no changes to the state rules included in this Significant Permit Modification.

Proposed Changes

The following changes were requested by BP in the Significant Permit Modification application submitted February 22, 2006. Bolded language has been added and language shown with a line through it has been deleted.

1. BP requested the construction dates included in MSM 089-21682-00453, issued December 20, 2005 be updated to reflect the correct construction date of 2006. The facility descriptions have been revised as shown below:

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

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) thermal oxidizer (identified as the BLTF Oxidizer), constructed in 200~~5~~**6**, and used to control VOC and HAP emissions from the J-161 vacuum pump vent in the Berry Lake Tank Field Remediation System. The BLTF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

(b) One (1) thermal oxidizer (identified as the ITF Oxidizer), constructed in 200~~5~~**6**, and used to control VOC and HAP emissions from the D-138 vapor/liquid separation tank, and the J-138, J-139, and J-140 well point systems in the Indiana Tank Field Remediation System. The ITF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) One (1) thermal oxidizer (identified as the BLTF Oxidizer), constructed in 200~~5~~**6**, and used to control VOC and HAP emissions from the J-161 vacuum pump vent in the Berry Lake Tank Field Remediation System. The BLTF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

(b) One (1) thermal oxidizer (identified as the ITF Oxidizer), constructed in 200~~5~~**6**, and used to control VOC and HAP emissions from the D-138 vapor/liquid separation tank, and the J-138, J-139, and J-140 well point systems in the Indiana Tank Field Remediation System. The ITF Oxidizer has a fuel heat input rate of 0.685 MMBtu per hour and burns natural gas as supplemental fuel.

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

2. BP requested Condition D.1.2 be revised to incorporate the Alternative Monitoring Plan approved by the U.S. EPA on January 9, 2006. The following changes have been made to the permit:

D.1.2 New Source Performance Standards [326 IAC 12][40 CFR 60, Subpart J]

~~Pursuant to 326 IAC 12 and 40 CFR 60, Subpart J, the Permittee shall comply with the requirements specified in Section E.1 for the BLTF and ITF thermal oxidizers.~~

(a) Pursuant to 40 CFR 60, Subpart J, the Permittee shall comply with the requirements specified in Section E.1 for the BLTF and ITF thermal oxidizers, except as outlined in the Alternative Monitoring Plan (AMP) incorporated in paragraphs (b) through (e) of this condition.

(b) To demonstrate compliance with paragraph (a) of this condition and as approved by the U.S. EPA on January 9, 2006, the Permittee shall comply with the following alternative compliance requirements for the BLTF and ITF thermal oxidizers:

(1) Upon startup of the ITF Thermal Oxidizer, the Permittee shall conduct initial sampling. The sampling shall consist of monitoring the H_2S content of the combined fuel gas stream prior to the thermal oxidizer once per day for fourteen (14) days. The results of the initial sampling shall be submitted to the U.S. EPA and IDEM, OAQ within fourteen (14) days of completion. The terms and conditions of this AMP may be revised based on the initial sampling data.

(2) The Permittee shall conduct random detector tube sampling at each AMP monitoring location twice per week for a period of six (6) months for a total of fifty-two (52) samples. If the calculated range and variability of the data set is less than 81 ppm H_2S, the Permittee shall comply with the requirements in paragraph (b)(3) of this condition. The Permittee shall submit all test data, including raw measurements and calculated average and variability to the U.S. EPA and IDEM, OAQ within thirty (30) days of the end of each calendar quarter.

(3) The Permittee shall conduct random detector tube sampling at each AMP monitoring location monthly for a period of two calendar quarters. Sampling shall occur randomly each month with a minimum of two (2) weeks between samples. If the calculated range and variability of the data set is less than 81 ppm H_2S, then the Permittee shall comply with the requirements in paragraph (b)(4). The Permittee shall submit all test data, including raw measurements and calculated average and variability, to the U.S. EPA and IDEM, OAQ within thirty (30) days of the end of each calendar quarter.

(4) The Permittee shall continue to conduct testing on a monthly basis at each AMP monitoring location. Testing is to occur randomly once every month with a minimum of two (2) weeks between samples. If any one sample is equal to or greater than 81 ppm H_2S, then the Permittee shall comply with

the requirements specified in paragraph (b)(5) of this condition for the affected thermal oxidizer. The Permittee shall submit all test data, including raw measurements, in the periodic report to the U.S. EPA and IDEM, OAQ within thirty (30) days of the end of each semi-annual period.

(5) If, at any time, a single detector tube sample value is equal to or greater than 81 ppm H_2S, the Permittee shall conduct detector tube sampling at the AMP monitoring location on a daily basis for seven (7) days. If the average detector tube result plus three (3) standard deviations for the seven (7) samples is less than 81 ppm H_2S, the Permittee shall submit the date and value of the monitoring event that triggered the additional sampling and the seven (7) day H_2S sample results in a written report submitted within thirty (30) days of the conclusion of the seven (7) day sampling. If the average plus three (3) standard deviations for the seven (7) samples is equal to or greater than 81 ppm H_2S, the Permittee shall comply with the requirements in paragraph (b)(6) of this condition. If the average plus three (3) standard deviations is less than 81 ppm H_2S, the Permittee shall resume the monitoring and reporting in accordance with the monitoring or reporting schedule listed in paragraphs (b)(1) through (4) that resulted in a sample greater than 81 ppm H_2S.

(6) If any sample detector tube data set indicates a potential for the emission limit to be exceeded, as outlined in paragraphs (e) or (b)(5) of this condition, the Permittee shall notify the U.S. EPA and IDEM, OAQ of those results before the end of the next business day following the last day of sample collection. The affected fuel gas stream shall subsequently be tested daily for a two (2) week period. After the two (2) week period is complete, sampling will continue once per week, or until the U.S. EPA approves a revised sampling schedule or makes a determination to withdraw approval of the gas stream/system from the AMP.

(c) The H_2S testing required by paragraph (b) of this condition shall be conducted using detector tubes – length of stain tube-type measurement. The detector tubes used for routine testing shall have a range of 0-10/0-100 ppm (N=10/1). Detector tubes with a range of 0-500 ppm shall be used for testing if the measured concentration exceeds 100 ppm H_2S.

(d) The monitoring location for the ITF and BLTF Thermal Oxidizers shall be on the fuel gas stream just prior to the thermal oxidizer. Specifically, for the ITF Thermal Oxidizer, the AMP monitoring location shall be after the vapors/gases from the well points J-138, J-139, and J-140 and the vapors from Tank D-138 combine. There shall not be vapors/gases added to the fuel stream after the AMP monitoring location.

(e) Data Range and Variability Calculation and Acceptance Criteria for the AMP: For paragraphs (b)(1) through (6) of this condition, sample range and variability shall be determined by calculating the average plus three (3) standard deviations for that test data set. If the average plus three (3) standard deviations for the test data set is less than 81 ppm H_2S, the sample range and variability are acceptable and the Permittee shall proceed to the next step of the monitoring schedule listed in paragraph (b) of this condition. If the data shows an unacceptable range and variability, the Permittee shall comply with the requirements in paragraph (b)(6) of this condition. If at any time, one detector tube sample is equal to or greater 81 ppm H_2S, the Permittee shall comply with the requirements in paragraph (b)(5).

Conclusion

The BLTF and ITF oxidizers shall be subject to the conditions of the attached proposed Significant Permit Modification No.: 089-22706-00453 to Minor Source Modification No. 089-21682-00453, issued December 20, 2005.

Appendix A
Alternative Monitoring Plan Approval

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

JAN 09 2006

REPLY TO THE ATTENTION OF
AE-17J

Linda Wilson, Environmental Superintendent
Whiting Business Unit
BP Products North America Inc.
2815 Indianapolis Boulevard
P.O. Box 710
Whiting, Indiana 46394-0710

Re: Request for Alternative Monitoring Plan
BP Whiting Business Unit – Fuel Gas Combustion Devices

Dear Ms. Wilson:

The United States Environmental Protection Agency (U.S. EPA) is in receipt of your letter dated October 3, 2005 requesting an alternative monitoring plan (AMP) for two thermal oxidizers that will be installed to control emissions from BP's onsite groundwater remediation system. A construction permit application for these thermal oxidizers was submitted to the Indiana Department of Environmental Management on August 15, 2005. The two thermal oxidizers, identified as the Indiana Tank Farm (ITF) Thermal Oxidizer, and the Berry Lake Tank Farm (BLTF) Thermal Oxidizer will be subject to the New Source Performance Standards for Petroleum Refineries (NSPS Subpart J). BP is requesting the ability to conduct hydrogen sulfide (H_2S) grab sampling of the refinery fuel gas combusted in the two thermal oxidizers on a staggered schedule as opposed to installing a continuous emission monitoring system (CEMS) as is required by NSPS Subpart J.

U.S. EPA hereby conditionally approves your request. The terms and conditions, including the schedule for sampling, are described below.

Background

BP's groundwater remediation system uses a vacuum pump to extract groundwater through a series of small wells, or well points, located at regular intervals along a vacuum header. Each well point system vacuum pump has an associated discharge vent that releases any entrained air in the removed groundwater. BP has four well point systems, identified as J138, J139, J140 and J161. Vapors generated at J138, J139 and J140 will be combusted at the ITF Thermal Oxidizer and the vapors generated at J161 will be combusted at the BLTF Thermal Oxidizer.

In addition, at the Indiana Tank Farm, BP operates a Groundwater/Vapor Separation Tank, identified as Tank D-138. Water pumped at the three Indiana Tank Farm well points is collected

in Tank D-138. Vapors generated from Tank D-138 will also be tied in with the vapors generated from J138, J139 and J140 and combusted in the ITF Thermal Oxidizer. Tank D-138 only collects the water generated from the ITF well points; there is no other material stored in Tank D-138.

BP has been monitoring the subsurface hydrocarbon plumes located adjacent to the well point systems since 1990. Based on the historical sampling data, BP has determined that the primary constituents of the plume near J161 are jet fuel and kerosene. BP has also determined that the primary constituents of the plume near J138, J139, and J140 are finished diesel and gasoline products, and secondary constituents of the plume near J138, J139 and J140 are middle distillates. All of these primary and secondary constituents have a low sulfur content.

In order to comply with 40 C.F.R. Part 63, Subpart GGGGG, "The National Emissions Standards for Hazardous Air Pollutants: Site Remediation," the BP Whiting Refinery is constructing two thermal oxidizers that will control emissions from the discharge vents on each well point system vacuum pump and the vapors generated from Tank D-138.

Discussion

The ITF and BLTF Thermal Oxidizers are fuel gas combustion devices (FGCDs) and are subject to NSPS Subpart J. NSPS Subpart J prohibits the combustion of fuel gas that contains H_2S in excess of 230 mg/dscm (0.10 gr/dscf) (see 40 C.F.R. § 60.104(a)(1)). For each FGCD, NSPS Subpart J requires that a facility continuously monitor the SO_2 emissions from the FGCD (40 C.F.R. § 60.105(a)(3)) or, as an alternative, the H_2S content of the fuel gases before they are burned in the FGCD (40 C.F.R. § 60.105a)(4)). H_2S CEMS can be located on a common fuel source serving multiple FGCDs.

40 C.F.R. § 60.13(i) gives the Administrator the authority to approve alternative monitoring plans. U.S. EPA posted a guidance document on its website entitled "Alternative Monitoring Plan for NSPS Subpart J Refinery Fuel Gas: Conditions for Approval of the Alternative Monitoring Plan for Miscellaneous Refinery Fuel Gas Streams" (RFG AMP Guidance) (see http://www.epa.gov/Compliance/resources/publications/monitoring/selfevaluation/petroleak.pdf). This guidance document describes the conditions and monitoring schedule required for approving a request such as yours.

The following is a list of documentation the RFG AMP Guidance requires a requestor to submit, including a discussion of the information actually submitted by Air Products:

- *A description of the gas stream/system to be considered including submission of a portion of the appropriate piping diagrams indicating the boundaries of the gas stream/system, and the affected fuel gas combustion device(s) to be considered and an identification of the proposed sampling point for the alternative monitoring;*

  BP's response: BP will combust gases that vent off the 4 well point system vacuum pumps in the two thermal oxidizers it is constructing. In addition, vapors generated in Tank D-138 will also be combusted in the ITF Thermal Oxidizer. The gases are

generated as part of its groundwater remediation system. The gases generated have the same constituents as the material in the plumes on the groundwater under the refinery. Diagrams showing the piping and the proposed sampling points were included with the AMP application.

- *A statement that there are no crossover or entry points for sour gas (high H2S content) to be introduced into the gas stream/system;*

BP's response: Amy Gannon, BP, states in an email dated January 3, 2006, that there are no crossover or entry points for any gases to the ITF or BLTF Thermal Oxidizers, other than those shown on the Figures submitted in the AMP. For the ITF Thermal Oxidizer this includes the three well point systems: J-138, J-139, J-140, and a groundwater separation tank, D-138. For the BLTF Thermal Oxidizer, this includes the J-161 well point system.

- *An explanation of the conditions that ensures low amounts of sulfur in the gas stream (i.e., control equipment or product specifications) at all times;*

BP's response: BP states in its October 3, 2005 letter that based on its analysis of the materials on the groundwater, there will be very little H2S in the fuel gas combusted in the thermal oxidizers. The H2S concentration of gases generated at remediation systems are primarily dependant on the H2S content of the material being recovered at the well points. BP has been monitoring the subsurface hydrocarbon plumes located adjacent to the well point systems since 1990. Based on the historical sampling data, BP has determined that the primary constituents of the plume near J161 are jet fuel and kerosene, the primary constituents of the plume near J138, J139, and J140 are finished diesel and gasoline products, and the secondary constituents of the plume near J138, J139 and J140 are middle distillates. All of these primary and secondary constituents have a low sulfur content. BP states that it expects very little variability in these plumes.

- *The supporting test results from sampling the requested gas stream/system using appropriate H_2S monitoring (i.e., detector tube monitoring following the Gas Processor Association's Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes, 1986 Revision) at a minimum: two weeks of daily monitoring (14 samples) for frequently operated gas streams/systems, or 7 samples or other additional information for infrequently operated gas streams/systems;*

BP's response: BP conducted detector tube sampling on the 4 well point systems (J138, J139, J140, and J161) beginning on August 8, 2005 and continuing for 14 consecutive days. The following is a summary of the results:

	J-138	J-139	J-140	J-161
Average	0.97 ppm H_2S	0.00 ppm H_2S	2.11 ppm H_2S	2.86 ppm H_2S
Standard Deviation	0.53 ppm H_2S	0.00 ppm H_2S	0.96 ppm H_2S	1.17 ppm H_2S
Avg + 3(Std Dev)	2.57 ppm H_2S	0.00 ppm H_2S	5.00 ppm H_2S	6.36 ppm H_2S

BP has not conducted testing on the vapors generated from Tank D-138. However, BP argues that since the water stored in Tank D-138 is the same as the water pumped at the three well point systems in the Indiana Tank Field, the gases generated would be similar in H2S content at the vapors tested at the three well point systems.

- *A description of how the two weeks (or seven samples for infrequently operated gas streams/systems) of monitoring results compares to the typical range of H_2S concentration (fuel quality) expected for the gas stream/system going to the affected fuel gas combustion device;*

BP's response: The H2S concentration of gases generated at remediation systems are primarily dependant on the H2S content of the material being recovered at the well points. BP has been monitoring the subsurface hydrocarbon plumes located adjacent to the well point systems since 1990. Based on the historical sampling data, BP has determined that the primary constituents of the plume near J161 are jet fuel and kerosene, the primary constituents of the plume near J138, J139, and J140 are finished diesel and gasoline products, and the secondary constituents of the plume near J138, J139 and J140 are middle distillates. All of these primary and secondary constituents have a low sulfur content. BP states that it expects very little variability in these plumes.

- *Identification of a representative process parameter that can function as an indicator of a stable and low H_2S concentration for each fuel gas stream/system;*

BP's response: In an email dated December 22, 2005, Amy Gannon, BP, stated that BP has not been able to identify a process parameter that would provide a suitable representation of the H2S content of the fuel gas generated at the well point systems other than possibly sampling the oil layer of the material on the groundwater, however only a small portion of the oil layer is actually pumped from the ground, and then only a small portion actually vaporizes. BP believes that the best indicator of compliance with NSPS Subpart J is to actually take regular samples of the fuel gas stream itself. Therefore, BP is proposing a more frequent sampling schedule than the one contained in EPA's RFG AMP Guidance.

- *Suggested process parameter limit for each stream/system, the rationale for the parameter limit and the schedule for the acquisition and review of the process parameter data. The facility will collect the proposed process parameter data in conjunction with the testing of the fuel gas stream's stable and low H_2S concentration.*

BP's response: BP has not proposed a process parameter to monitor. See above response for details.

Conditions and Terms of Approval of AMP

1. **Initial Sampling:** Beginning immediately upon startup of the ITF Thermal Oxidizer, BP shall conduct initial sampling. This shall consist of monitoring the H_2S content of the feed to the ITF Thermal Oxidizer once per day for 14 days (see Condition # 4, below, for

the AMP monitoring location for the ITF Thermal Oxidizer). The monitoring shall be conducted using a grab sample that is analyzed using detector tube monitoring following the Gas Processor Association's "Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes", 1986 Revision. The results of the initial sampling shall be submitted to U.S. EPA and IDEM within 14 days of completion. It is possible that the terms and conditions of this AMP may be revised based on the initial sampling data.

2. **No Crossover/Entry Points:** Approval of this AMP is based on the following facts: 1) there are no crossover or entry points for any other gas streams to potentially be combusted in either of the thermal oxidizers, and 2) there are no other materials being transferred to, or stored in, Tank D-138 other than groundwater pumped from the ITF well points J138, J139 and J140.

3. **Testing Methodology:** H_2S testing shall be conducted using detector tubes ("length-of-stain tube" type measurement). The detector tubes used for routine testing shall have a range of 0-10/0-100 ppm (N=10/1). Detector tubes with a range of 0-500 ppm shall be used for testing if the measured concentration exceeds 100 ppm H_2S.

4. **AMP Monitoring Location:** The monitoring location for the ITF and BLTF Thermal Oxidizers shall be on the fuel gas stream just prior to the thermal oxidizer. Specifically for the ITF Thermal Oxidizer, the AMP Monitoring Location shall be after the vapors/gases from the well points J138, J139 and J140 and the vapors from Tank D-138 combine. There shall not be vapors/gases added to the fuel gas stream after the AMP Monitoring Location.

5. **AMP Monitoring Schedule:**

Step 1:

BP will conduct random detector tube sampling at each AMP monitoring location (see Condition #4, above) twice per week for a period of six months (52 samples). BP shall move to Step 2 if the calculated range and variability of the data for each AMP Monitoring Location meets the established acceptance criteria (see Condition #6 below). BP shall submit all test data, including raw measurements plus calculated average and variability to U.S. EPA and IDEM within 30 days of the end of each calendar quarter.

Step 2:

BP shall conduct random detector tube sampling at each AMP monitoring location (see Condition #4, above) monthly. Sampling shall occur randomly each month with a minimum of 2 weeks between samples. BP shall move to Step 3 if the calculated range and variability of the data for each AMP Monitoring Location meets the established acceptance criteria (see Condition #6, below). BP shall submit all test

data, including raw measurements plus calculated average and variability, to the U.S. EPA and IDEM within 30 days of the end of each calendar quarter.

Step 3:

BP shall continue to conduct testing on a monthly basis. Testing is to occur randomly once every month with a minimum of 2 weeks between samples. If any one sample is equal to or greater than 81 ppm H2S, then BP shall proceed to the sampling specified in Step 4 below for the affected AMP Monitoring Location. BP shall submit all test data, including raw measurements, to the U.S. EPA and IDEM within 30 days of the end of each semi-annual period.

Step 4:

If, at any time, a single detector tube sample value is equal to or greater than 81 ppm H_2S, then BP shall conduct detector tube sampling at the AMP monitoring location on a daily basis for 7 days. If the average detector tube result plus 3 standard deviations for those seven samples is less than 81 ppm H_2S, BP shall submit the date and value of the monitoring event that triggered the additional sampling and the 7 day H_2S sample results in a written report submitted within 30 days after the conclusion of the 7 day sampling. If the average plus 3 standard deviations for those seven samples is equal to or greater than 81 ppm H2S, sampling shall follow the requirements of Step 5. Otherwise, BP shall resume monitoring and reporting in accordance with the schedule of the current step.

Step 5:

If sample detector tube data indicates a potential for the emission limit to be exceeded (i.e., the average plus 3 standard deviations of the sampling is equal to or greater than 81 ppm H2S), as determined in the Data Range and Variability Calculation and Acceptance Criteria or as determined in Step 4, BP shall notify the U.S. EPA and IDEM of those results before the end of the next business day following the last sample day. The affected fuel gas stream shall subsequently be tested daily for a two week period. After the two week period is complete, sampling will continue once per week, or until the agency approves a revised sampling schedule or makes a determination to withdraw approval of the gas stream/system from the AMP.

6. **Data Range and Variability Calculation and Acceptance Criteria:** For each step of the monitoring schedule, sample range and variability will be determined by calculating the average plus 3 standard deviations for that test data set.

   If the average plus 3 standard deviations for the test data set is less than 81 ppm (i.e., one-half the maximum allowable under NSPS Subpart J), the sample range and variability are acceptable and BP can proceed to the next step of the monitoring schedule.

If the data shows an unacceptable range and variability at any step (i.e., the average plus 3 standard deviations is equal to or greater than 81 ppm H2S), BP shall move to Step 5 of the AMP Monitoring Schedule, above. If at any time, one detector tube sample value is equal to or greater than 81 ppm H2S, then begin sampling as specified in Step 4 of the AMP Monitoring Schedule.

If you have any questions regarding this AMP, please contact Katherine Keith, of my staff, at (312) 353-6956.

Sincerely,

George T. Czerniak, Chief
Air Enforcement and Compliance Assurance Branch

cc: Phil Perry, Chief
Air Compliance Branch
Indiana Department of Environmental Management