

Mr. Daniel F. Brown
Phend & Brown, Inc.
PO Box 150
Milford, IN 46542-0150

Re: **SMF 049-9404**
First Significant Modification to
FESOP 049-6486-03137

Dear Mr. Brown:

Phend & Brown, Inc. was issued a permit on December 11, 1996 for a hot batch mix asphalt concrete source. A letter requesting changes to this permit was received on January 22, 1998. Pursuant to the provisions of 326 IAC 2-8-11 a significant modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the construction of one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) Btu per hour using No. 2 fuel oil and waste oil as back up fuels to replace the existing 46 mmBtu/hr burner.

The modification is subject to the New Source Performance Standard, 326 IAC 12, 40 CFR 60.90, Subpart I, for hot mix asphalt plants. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Felicity L. Lao, of my staff, at the above address; or by phone at 317-233-5688 or 1-800-451-6027 (ext 3-5688).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

FLL

cc: File - Fulton County
U.S. EPA, Region V
Fulton County Health Department
Air Compliance Section Inspector - Eric Courtright
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) and Enhanced New
Source Review (ENSR)
OFFICE OF AIR MANAGEMENT**

**Phend & Brown, Inc.
Fulton Wabash County Line Road 0.5 Mi N. of SR 114 near
Disko, Indiana 46927**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F049-6486-03137	
Original issued by Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996
First Significant Permit Modification: SMF049-9404	Pages Affected: 4, 21, 21a, 22, 22a, 29
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a hot batch mix asphalt concrete source.

Responsible Official: Daniel F. Brown
Source Address: Fulton Wabash County Line Road, 0.5 mile north of State Road 114 near
Disko, Indiana 46927
Mailing Address: P. O. Box 150, Milford, Indiana 46542-0150
SIC Code: 2951
County Location: Fulton
County Status: Attainment for all criteria pollutants
Source Status: Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

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

- (a) one (1) asphalt batch dryer mixer, with a maximum capacity of 160 tons per hour, equipped with one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) Btu per hour, using No. 2 fuel oil and waste oil as back-up fuels, and one (1) cyclone/wet scrubber dust collecting system for air pollution control, exhausting at one (1) stack, identified as SV1;
- (b) one (1) 5' x 10' 3-deck screen;
- (c) two (2) conveyors to transfer aggregates from feed bins to asphalt dryer; and
- (d) production of cold-mix (stock pile mix) asphalt concrete.

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (a) one (1) distillate No. 2 fuel oil fired liquid asphalt tank heater, with a maximum capacity of 1.4 million British thermal units per hour, exhausting at one (1) stack, identified as SV2;
- (b) four (4) raw aggregate storage piles with a total storage capacity of 22,000 tons;
- (c) one (1) reclaimed asphalt pavement storage pile with a total storage capacity of 3,200 tons;
- (d) one (1) 1,000 gallon No. 2 fuel oil storage tank identified as SV3;
- (e) two (2) 10,000 gallon asphalt cement storage tanks identified as SV4 and SV5;
- (f) one (1) 10,000 gallon asphalt emulsion storage tank identified as SV6;
- (g) one (1) 8,000 gallon No. 4 fuel oil storage tank identified as SV7;
- (h) one (1) 8,000 gallon No. 2 fuel oil storage tank identified as SV8;
- (i) one (1) reclaimed asphalt storage bin with conveyor;
- (j) unpaved roads with public access;
- (k) four (4) virgin aggregate feeder bins; and
- (l) one (1) bucket elevator with 18" x 8" buckets.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) one (1) asphalt batch dryer mixer, with a maximum capacity of 160 tons per hour, equipped with one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million British thermal units per hour, using No. 2 fuel oil and waste oil as back-up fuels, and one (1) cyclone/wet scrubber dust collecting system for air pollution control, exhausting at one (1) stack, identified as SV1;
- (b) one (1) 5' x 10' 3-deck screen; and
- (c) two (2) conveyors to transfer aggregates from feed bins to asphalt dryer.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

General Construction Conditions [326 IAC 2-1-3.2]

D.1.1a This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.1.2a Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.1.3a Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM, may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.1.4a All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

D.1.5a This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit

conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

- (c) The permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

D.1.1 Particulate Matter

Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the mixing and drying operation shall not exceed 56.1 pounds per hour.

D.1.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 75.6 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 and 1.6 pounds per million Btu heat input for No. 4 (or No. 2) fuel oil and waste oil, respectively. This is equivalent to a sulfur content of less than or equal to 0.50 percent when using No. 4 (or No. 2) fuel oil and 1.49 percent when using waste oil, respectively. Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown and malfunction.

D.1.3 No. 4 Fuel Oil Usage

The input of No. 4 fuel oil to the 75.6 million British thermal units per hour burner for the aggregate dryer based on a maximum fuel oil sulfur content of 0.50 percent shall be limited, to 2,413,763 U.S. gallons per twelve (12) consecutive months. The total for each month shall not exceed the difference between the annual limit minus the sum of actual usage from the previous eleven (11) months. Compliance is based on the total fuel used during the previous 12 months. For purposes of determining compliance, when backup fuels are burned, the following equivalency calculations shall be performed:

- (a) each gallon of No.2 fuel oil burned based on a maximum fuel oil sulfur content of 0.50 percent is equivalent to 0.947 gallons of No. 4 fuel oil burned;
- (b) each million cubic foot (MMCF) of natural gas burned is equivalent to 5,780.6 gallons of No. 4 fuel oil burned; and
- (c) each gallon of waste oil burned based on a maximum fuel oil sulfur content of 1.2 percent is equivalent to 2.42 gallons of No. 4 fuel oil burned.

The total amount of No. 4 fuel oil and No. 4 fuel oil equivalence combined shall not exceed the limit specified. During the first twelve (12) months of operation under this permit, the No. 4 fuel oil and No. 4 fuel oil equivalent combined shall be limited such that the total gallons divided by the accumulated months of operation shall not exceed 201,147 U.S. gallons per month. Therefore, the requirements of 326 IAC 2-7 will not apply.

D.1.4 Preventive Maintenance Plan [326 IA. 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for each facility.

D.1.4.1 NSPS Requirements [40 CFR 60.90, Subpart I]

- (a) On and after the date on which a performance test is required to be conducted by §60.8 is completed, no owner or operator shall discharge or cause the discharge into the atmosphere from the 75.6 mmBtu/hr burner any gases which
 - (1) contain particulate matter in excess of 90mg/dscm (0.04 gr/dscf);
 - (2) exhibit 20 percent opacity or greater.
- (b) the owner or operator shall determine compliance with the particulate matter standards in §60.892 as follows:
 - (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
 - (2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.5 Particulate Matter

During the period between 30 months and 36 months after issuance of this permit, the Permittee shall perform PM and PM10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10.

D.1.6 Sulfur Dioxide Emissions and Sulfur Content

The Permittee shall test for:

- (a) Sulfur content of oil burned as fuel by the 75.6 million Btu per hour burner for the aggregate dryer, using 40 CFR Part 60, Appendix A, Method 19 for each load of oil delivered; or
- (b) Sulfur dioxide emissions from the 75.6 million Btu per hour burner for the aggregate dryer, using 40 CFR Part 60, Appendix A, Method 6 each time a test to comply with Condition D.1.4 is performed.

Sulfur content tests may be made by the oil supplier.

D.1.6.1 Particulate and Opacity Testing Required by NSPS [40 CFR 60.90, Subpart I]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Method 5 (40 CFR 60, Appendix A) and opacity testing utilizing Method 9, or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.7 Pressure and Flow Rate Readings

The Permittee shall take pressure and scrubbing liquid (water) flow rate readings across the wet scrubber controlling the mixing and drying operation, at least once per working shift when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the wet scrubber shall be maintained within the range of 11.0 and 16.0 inches of water and the flow rate for scrubbing liquid shall be maintained within the range of 225 to 275 gallons per minute or a range and flow rate established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading or flow rate is outside of this range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.11 - Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.8 Daily Visible Emission Notations

Daily visible emission notations of the conveyers, material transfers, aggregate storage piles, unpaved roads, and the mixing and drying operation stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processed operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation specified condition prescribing visible emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive

Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.1.9 Wet Scrubber Failure Detection

In the event that the wet scrubber is observed to be operating with a static pressure drop or a liquid flow rate below the low end range for more than two (2) hours during production:

- (a) Troubleshooting shall be implemented and corrective action shall be taken within eight (8) hours of discovery.
- (b) If the corrective action does not correct the problem, then additional corrective actions shall be devised within eight (8) hours of discovery and shall include a timetable for completion.
- (c) For a complete failure of the water supply system to the wet scrubber, the asphalt mixing and drying operations shall be shut down immediately until the supply of water has been restored.

D.1.10 Preventive Inspections

The following inspections shall be performed when the dryer is operating in accordance with the Preventive Maintenance Plan prepared pursuant to Condition B.13:

Daily:

- (a) Inlet gas temperature;
- (b) Outlet gas temperature;
- (c) Liquor recirculation rate;
- (d) Liquor PH;
- (e) Water makeup rate;
- (f) Liquid line blockage; and
- (g) Nozzle blockage and pressure.

Weekly:

- (a) Liquor solids' concentration; and
- (b) Liquor total dissolved solids..

Monthly:

- (a) Instrument air; and
- (b) Valve operation.

D.1.11 Fuel Oil Sampling and Analysis

Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with 326 IAC 3-3-4. If a partially empty fuel tank is refilled, a new sample and analysis is required upon filling. Vendor analysis of each load delivered is acceptable, in lieu of the above, if accompanied by a certification.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.12 Operational Parameters

The Permittee shall maintain a daily record for the cyclone/wet scrubber system controlling particulate matter emissions from asphalt mixing and drying operations of the following values:

- (a) Inlet and outlet differential static pressure;
- (b) Scrubbing liquid flow rate;
- (c) Visible observations;
- (d) Checklist with dates and initials for each preventive action performed; and
- (e) Records of corrective actions.

D.1.13 Oil Usage

- (a) Complete and sufficient records shall be kept to establish compliance with the fuel oil usage limits and sulfur dioxide emission limit established in this permit and contain a minimum of the following:
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual No. 4 fuel oil usage and No. 4 fuel oil equivalence during the period and calculated sulfur dioxide content;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
 - (4) Fuel supplier certifications.
- (b) The supplier certification shall contain, as a minimum, the following:
 - (1) The name of the oil supplier; and
 - (2) A statement from the oil supplier that certifies the sulfur content and heat content of the fuel oil.

D.1.14 Re-refined Waste Oil Usage

Pursuant to 329 IAC 3.1-11 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), the re-refined waste oil burned in the aggregate dryer burner shall meet the used oil specifications in 40 CFR 266.40 (e). Therefore, 40 CFR 266 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), Subpart E (used oil burned for energy recovery), does not apply.

D.1.15 Quarterly Reporting

A quarterly summary to document compliance with operation conditions numbers D.1.2 and D.1.3 shall be submitted, to the address listed in condition C.16 - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

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

FESOP Quarterly Report

Source Name: Phend & Brown, Inc.
 Source Address: Fulton Wabash County Line Road 0.5 mile north of State Road 114 near
 Disko, Indiana 46927
 FESOP No.: F049-6486-03137
 Facility: 75.6 million British thermal units burner for the aggregate dryer
 Parameter: sulfur dioxide
 Limits: sulfur content of No.4 fuel oil and No.2 fuel oil not to exceed 0.50 percent , and
 sulfur content of waste oil not to exceed 1.2 percent ; 2,413,763 gallons of No. 4
 fuel oil and No. 4 fuel oil equivalent combined per last 12-month period. For
 purposes of determining compliance: (a) each gallon of No.2 fuel oil burned is
 equivalent to 0.947 gallons of No. 4 fuel oil burned; and (b) each gallon of waste oil
 burned is equivalent to 2.42 gallons of No. 4 fuel oil burned.

The total amount of No. 4 fuel oil and No. 4 fuel oil equivalence combined shall not
 exceed 201,147 gallons per month for the first 12 months of operation under this
 permit.

Month: _____ Year: _____

Month	Sulfur Content (%)	Heat Content (Btu/gallon)	No. 4 Fuel usage (gal/month)	No. 4 equivalent Fuel usage (gal/month)	No. 4 and No. 4 equivalent Fuel usage last 12 months (gallons)

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____

**Indiana Department of Environmental Management
Office of Air Management**

**Technical Support Document for First Significant Permit Modification
of the Federally Enforceable State Operating Permit (FESOP) and
Enhanced New Source Review (ENSR)**

Source Background and Description

Source Name:	Phend & Brown, Inc.	
Source Location:	Fulton Wabash County Line Road, 0.5 Mi. N. of SR 114, near Disko, Indiana 46927	
County:	Fulton	
Permit No.:	F049-6486-03137	Issued: December 11, 1996
Revision No.	SMF-049-9404	
SIC Code:	2951	
Permit Reviewer:	Felicity L. Lao	

History

On December 11, 1996, a FESOP was issued to Phend & Brown, Inc. relating to the operation of a hot batch mix asphalt concrete source. On January 22, 1998, a letter was received from Phend & Brown, Inc. requesting changes to the permit.

Existing Source

These emission units are permitted under FESOP permit number F-049-6486-03137, issued on December 11, 1996.

(a) **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following approvals (permits, registrations, exemptions, etc.) with the following emission units and pollution control devices:

- (1) one (1) asphalt batch dryer mixer, with a maximum capacity of 160 tons per hour, equipped with one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 46 million (MM) Btu per hour, using No. 2 fuel oil and waste oil as back-up fuels, and one (1) cyclone/wet scrubber dust collecting system for air pollution control, exhausting at one (1) stack, identified as SV1;
- (2) one (1) 5' x 10' 3-deck screen;
- (3) two (2) conveyors to transfer aggregates from feed bins to asphalt dryer; and
- (4) production of cold-mix (stock pile mix) asphalt concrete.

(b) **Insignificant Activities**

The source also includes the following insignificant activities:

- (1) one (1) distillate No. 2 fuel oil fired liquid asphalt tank heater, with a maximum capacity of 1.4 MMBTU/HR/hr, exhausting at one (1) stack, identified as SV2;
- (2) four (4) raw aggregate storage piles with a total storage capacity of 22,000 tons;

- (3) one (1) reclaimed asphalt pavement storage pile with a total storage capacity of 3,200 tons;
- (4) one (1) 1,000 gallon No. 2 fuel oil storage tank identified as SV3;
- (5) two (2) 10,000 gallon asphalt cement storage tanks identified as SV4 and SV5;
- (6) one (1) 10,000 gallon asphalt emulsion storage tank identified as SV6;
- (7) one (1) 8,000 gallon No. 4 fuel oil storage tank identified as SV7;
- (8) one (1) 8,000 gallon No. 2 fuel oil storage tank identified as SV8;
- (9) unpaved roads with public access;
- (10) four (4) virgin aggregate feeder bins; and
- (11) one (1) bucket elevator with 18" x 8" buckets.

Changes Proposed

The Office of Air Management (OAM) has reviewed an application from Phend & Brown, Inc. relating to the requested revisions of their FESOP and is proposing the following changes:

Replacement of one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 46 million (MM) Btu per hour, using No. 2 fuel oil and waste oil as back-up fuels with One (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) Btu per hour using No. 2 fuel oil and waste oil as back up fuels.

Enforcement Issue

None

Recommendation

The staff recommends to the Commissioner that the modification be approved.

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

This proposed permit will satisfy the construction permit requirements of 326 IAC 2-1.

Emissions Calculations

Calculations for this modification can be found in Appendix A pages 1-3.

The potential emissions for the new burner indicate construction permit levels. There were no changes made to the limits for the sulfur content of No. 4 fuel oil, No. 2 fuel oil and waste oil or the amount of oil used, therefore, this is being reviewed as a significant modification with an Enhanced New Source Review to cover the construction permit requirements without having to issue a separate construction permit.

Total Potential and Allowable Emissions

See Technical Support Document of original FESOP.

Federal Rule Applicability

The 75.6 mmBtu/hr burner replacing the 46 mmBtu/hr burner is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.90, Subpart I) because it is a modification that was constructed after June 11, 1973.

- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility (the 75.6 mmBtu/hr burner) any gases which:
 - (1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf).
 - (2) Exhibit 20 percent opacity or greater.
- (b) The owner or operator shall determine compliance with the particulate matter standards in §60.92 as follows:
 - (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
 - (2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

State Rule Applicability

There are no changes in State rule applicability from the original FESOP.

Air Toxic Emissions

There are no changes in the air toxic emissions due to this modification since there were no changes made to the limits for the sulfur content of No. 4 fuel oil, No. 2 fuel oil and waste oil or the amount of oil used.

FESOP Changes

The following FESOP changes were agreed to as the First Significant Modification for this source:

Upon further review, OAM has changed the maximum fuel oil sulfur content in Conditions D.1.2 and D.1.3 on page 21 of the permit, and on the Quarterly Report form on page 29 of the permit from 0.49 percent to **0.50 percent**.

1. Condition A.2 on page 4 of the permit to incorporate the 75.6 mmBtu/hr burner (changes bolded for emphasis):

A.2 Emission Units and Pollution Control Summary

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

- (a) one (1) asphalt batch dryer mixer, with a maximum capacity of 160 tons per hour, equipped with **one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) Btu per hour, using No. 2 fuel oil and waste oil as back-up fuels**, and one (1) cyclone/wet scrubber dust collecting system for air pollution control, exhausting at one (1) stack, identified as SV1;
- (b) one (1) 5' x 10' 3-deck screen;
- (c) two (2) conveyors to transfer aggregates from feed bins to asphalt dryer; and

(d) production of cold-mix (stock pile mix) asphalt concrete.

2. Facility description in Section D.1 on page 21 of the permit, to incorporate the 75.6 mmBtu/hr/hr burner (changes bolded for emphasis):

- (a) one (1) asphalt batch dryer mixer, with a maximum capacity of 160 tons per hour, equipped with **one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million British thermal units per hour, using No. 2 fuel oil and waste oil as back-up fuels**, and one (1) cyclone/wet scrubber dust collecting system for air pollution control, exhausting at one (1) stack, identified as SV1;
- (b) one (1) 5' x 10' 3-deck screen; and
- (c) two (2) conveyors to transfer aggregates from feed bins to asphalt dryer.

3. Condition D.1.2 on page 21 to read (changes bolded for emphasis):

D.1.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the **75.6 million Btu per hour burner** for the aggregate dryer shall be limited to 0.5 and 1.6 pounds per million Btu heat input for No. 4 (or No. 2) fuel oil and waste oil, respectively. This is equivalent to a sulfur content of less than or equal to 0.50 percent when using No. 4 (or No. 2) fuel oil and 1.49 percent when using waste oil, respectively. Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown and malfunction.

4. Condition D.1.3 on page 21 to read (changes bolded for emphasis):

D.1.3 No. 4 Fuel Oil Usage

The input of No. 4 fuel oil **to the 75.6 million British thermal units per hour burner** for the aggregate dryer based on a maximum fuel oil sulfur content of 0.50 percent shall be limited, to 2,413,763 U.S. gallons per twelve (12) consecutive months. The total for each month shall not exceed the difference between the annual limit minus the sum of actual usage from the previous eleven (11) months. Compliance is based on the total fuel used during the previous 12 months. For purposes of determining compliance, when backup fuels are burned, the following equivalency calculations shall be performed:

5. Condition D.1.6 on page 22 to read (changes bolded for emphasis):

D.1.6 Sulfur Dioxide Emissions and Sulfur Content

The Permittee shall test for:

- (a) Sulfur content of oil burned as fuel by the **75.6 million Btu per hour burner** for the aggregate dryer, using 40 CFR Part 60, Appendix A, Method 19 for each load of oil delivered; or
- (b) Sulfur dioxide emissions from the **75.6 million Btu per hour burner** for the aggregate dryer, using 40 CFR Part 60, Appendix A, Method 6 each time a test to comply with Condition D.1.4 is performed.

Sulfur content tests may be made by the oil supplier.

6. The header of the FESOP Quarterly Report Form on page 29 of the permit has been changed to read (changes bolded for emphasis):

OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Phend & Brown & Brown, Inc.
Source Address: Fulton Wabash County Line Road 0.5 mile north of State Road 114 near
Disko, Indiana 46927
FESOP No.: F049-6486-03137
Facility: **75.6 million British thermal units burner for the aggregate dryer**
Parameter: sulfur dioxide
Limits: sulfur content of No.4 fuel oil and No.2 fuel oil not to exceed 0.50 percent , and
sulfur content of waste oil not to exceed 1.2 percent ; 2,413,763 gallons of No. 4
fuel oil and No. 4 fuel oil equivalent combined per last 12-month period. For
purposes of determining compliance: (a) each gallon of No.2 fuel oil burned is
equivalent to 0.947 gallons of No. 4 fuel oil burned; and (b) each gallon of waste
oil burned is equivalent to 2.42 gallons of No. 4 fuel oil burned.

7. Conditions D.1.1a, D.1.2a, D.1.3a, D.1.4a, D.1.5a on pages 21 and 21a of the permit were added to satisfy the construction permit requirements.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

General Construction Conditions [326 IAC 2-1-3.2]

D.1.1a This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

- D.1.2a Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.1.3a Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM, may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.
- D.1.4a All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

D.1.5a This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management

100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) The permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.
8. Condition D.1.4.1 was added to satisfy the NSPS requirements for the addition of the new 75 mmBtu/hr burner.

D.1.4.1 NSPS Requirements [40 CFR 60.90, Subpart I]

- (a) On and after the date on which a performance test is required to be conducted by §60.8 is completed, no owner or operator shall discharge or cause the discharge into the atmosphere from the 75.6 mmBtu/hr burner any gases which
 - (1) contain particulate matter in excess of 90mg/dscm (0.04 gr/dscf);
 - (2) exhibit 20 percent opacity or greater.
 - (b) the owner or operator shall determine compliance with the particulate matter standards in §60.892 as follows:
 - (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).
 - (2) Method 9 and the procedures in §60.11 shall be used to determine opacity.
9. Condition D.1.6.1 was added to satisfy the testing requirements from the NSPS.

D.1.6.1 Particulate and Opacity Testing Required by NSPS [40 CFR 60.90, Subpart I]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Method 5 (40 CFR 60, Appendix A) and opacity testing utilizing Method 9, or other methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

Conclusion

The modifications of this source will be subject to the conditions of the attached proposed **FESOP Significant Modification Permit No. SMF-049-9404-03137**.

**Indiana Department of Environmental Management
Office of Air Management**

Addendum to the
Technical Support Document for First Significant Permit Modification
of the Federally Enforceable State Operating Permit (FESOP)

Source Name:	Phend & Brown, Inc.	
Source Location:	Fulton Wabash County Line Road, 0.5 Mi. N. of SR 114, near Disko, Indiana 46927	
County:	Fulton	
SIC Code:	2951	
Operation Permit No.:	F049-6486-03137	Issued: December 11, 1996
Revision No.	SMF-049-9404-03137	
Permit Reviewer:	Felicity L. Lao	

On March 31, 1998, the Office of Air Management (OAM) had a notice published in the Rochester Sentinel, Rochester, Indiana, stating that Phend & Brown, Inc. had applied for a FESOP to operate a hot mix batch asphalt concrete source. The notice also stated that OAM 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, OAM has made the following changes to the final Part 70 permit (changes are bolded for emphasis):

- Condition D.1.4.1 (b) and Condition D.1.6.1 have been removed from the final permit since they are repetitive with the testing requirements in Condition D.1.5.
- Section D.1.5 has added the following sentence to cover the opacity limit required by the NESHAP:

D.1.5 Particulate Matter
During the period between 30 months and 36 months after issuance of this permit, the Permittee shall perform PM and PM10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, **and opacity testing utilizing Method 9, or other methods** as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10.
- The cover page has been changed to reflect the readjusted page numbers to account for the removal of the above sections.

First Significant Permit Modification: SMF049-9404	Pages Affected: 4, 21, 21a, 22, 22a , 29
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) and Enhanced New
Source Review (ENSR)
OFFICE OF AIR MANAGEMENT**

**Phend & Brown, Inc.
Fulton Wabash County Line Road 0.5 Mi N. of SR 114 near
Disko, Indiana 46927**

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F049-6486-03137	
Original issued by Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996
First Significant Permit Modification: SMF049-9404	Pages Affected: 4, 21, 21a, 22, 29
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a hot batch mix asphalt concrete source.

Responsible Official: Daniel F. Brown
Source Address: Fulton Wabash County Line Road, 0.5 mile north of State Road 114 near
Disko, Indiana 46927
Mailing Address: P. O. Box 150, Milford, Indiana 46542-0150
SIC Code: 2951
County Location: Fulton
County Status: Attainment for all criteria pollutants
Source Status: Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

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

- (a) one (1) asphalt batch dryer mixer, with a maximum capacity of 160 tons per hour, equipped with one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million (MM) Btu per hour, using No. 2 fuel oil and waste oil as back-up fuels, and one (1) cyclone/wet scrubber dust collecting system for air pollution control, exhausting at one (1) stack, identified as SV1;
- (b) one (1) 5' x 10' 3-deck screen;
- (c) two (2) conveyors to transfer aggregates from feed bins to asphalt dryer; and
- (d) production of cold-mix (stock pile mix) asphalt concrete.

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (a) one (1) distillate No. 2 fuel oil fired liquid asphalt tank heater, with a maximum capacity of 1.4 million British thermal units per hour, exhausting at one (1) stack, identified as SV2;
- (b) four (4) raw aggregate storage piles with a total storage capacity of 22,000 tons;
- (c) one (1) reclaimed asphalt pavement storage pile with a total storage capacity of 3,200 tons;
- (d) one (1) 1,000 gallon No. 2 fuel oil storage tank identified as SV3;
- (e) two (2) 10,000 gallon asphalt cement storage tanks identified as SV4 and SV5;
- (f) one (1) 10,000 gallon asphalt emulsion storage tank identified as SV6;
- (g) one (1) 8,000 gallon No. 4 fuel oil storage tank identified as SV7;
- (h) one (1) 8,000 gallon No. 2 fuel oil storage tank identified as SV8;
- (i) one (1) reclaimed asphalt storage bin with conveyor;
- (j) unpaved roads with public access;
- (k) four (4) virgin aggregate feeder bins; and
- (l) one (1) bucket elevator with 18" x 8" buckets.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) one (1) asphalt batch dryer mixer, with a maximum capacity of 160 tons per hour, equipped with one (1) No. 4 fuel oil fired aggregate dryer burner with a maximum rated capacity of 75.6 million British thermal units per hour, using No. 2 fuel oil and waste oil as back-up fuels, and one (1) cyclone/wet scrubber dust collecting system for air pollution control, exhausting at one (1) stack, identified as SV1;
- (b) one (1) 5' x 10' 3-deck screen; and
- (c) two (2) conveyors to transfer aggregates from feed bins to asphalt dryer.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

General Construction Conditions [326 IAC 2-1-3.2]

D.1.1a This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.1.2a Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.1.3a Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM, may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.1.4a All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

D.1.5a This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) The permittee shall receive an Operation Permit Validation Letter from the Chief of the

Permit Administration & Development Section and attach it to this permit.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

D.1.1 Particulate Matter

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the mixing and drying operation shall not exceed 56.1 pounds per hour.
- (b) Pursuant to 326 IAC 2-8-4 (FESOP), the PM10 emissions from the mixing and drying operation shall not exceed 21.73 pounds per hour.

D.1.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 75.6 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 and 1.6 pounds per million Btu heat input for No. 4 (or No. 2) fuel oil and waste oil, respectively. This is equivalent to a sulfur content of less than or equal to 0.50 percent when using No. 4 (or No. 2) fuel oil and 1.49 percent when using waste oil, respectively. Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown and malfunction.

D.1.3 No. 4 Fuel Oil Usage

The input of No. 4 fuel oil to the 75.6 million British thermal units per hour burner for the aggregate dryer based on a maximum fuel oil sulfur content of 0.50 percent shall be limited, to 2,413,763 U.S. gallons per twelve (12) consecutive months. The total for each month shall not exceed the difference between the annual limit minus the sum of actual usage from the previous eleven (11) months. Compliance is based on the total fuel used during the previous 12 months. For purposes of determining compliance, when backup fuels are burned, the following equivalency calculations shall be performed:

- (a) each gallon of No.2 fuel oil burned based on a maximum fuel oil sulfur content of 0.50 percent is equivalent to 0.947 gallons of No. 4 fuel oil burned;
- (b) each million cubic foot (MMCF) of natural gas burned is equivalent to 5,780.6 gallons of No. 4 fuel oil burned; and
- (c) each gallon of waste oil burned based on a maximum fuel oil sulfur content of 1.2 percent is equivalent to 2.42 gallons of No. 4 fuel oil burned.

The total amount of No. 4 fuel oil and No. 4 fuel oil equivalence combined shall not exceed the limit specified. During the first twelve (12) months of operation under this permit, the No. 4 fuel oil and No. 4 fuel oil equivalent combined shall be limited such that the total gallons divided by the accumulated months of operation shall not exceed 201,147 U.S. gallons per month. Therefore, the requirements of 326 IAC 2-7 will not apply.

D.1.4 Preventive Maintenance Plan [326 IA. 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for each facility.

D.1.4.1 NSPS Requirements [40 CFR 60.90, Subpart I]

- (a) On and after the date on which a performance test is required to be conducted by §60.8 is completed, no owner or operator shall discharge or cause the discharge into the atmosphere from the 75.6 mmBtu/hr burner any gases which
 - (1) contain particulate matter in excess of 90mg/dscm (0.04 gr/dscf);

- (2) exhibit 20 percent opacity or greater.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.5 Particulate Matter

During the period between 30 months and 36 months after issuance of this permit, the Permittee shall perform PM and PM10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10.

D.1.6 Sulfur Dioxide Emissions and Sulfur Content

The Permittee shall test for:

- (a) Sulfur content of oil burned as fuel by the 75.6 million Btu per hour burner for the aggregate dryer, using 40 CFR Part 60, Appendix A, Method 19 for each load of oil delivered; or
- (b) Sulfur dioxide emissions from the 75.6 million Btu per hour burner for the aggregate dryer, using 40 CFR Part 60, Appendix A, Method 6 each time a test to comply with Condition D.1.4 is performed.

Sulfur content tests may be made by the oil supplier.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.7 Pressure and Flow Rate Readings

The Permittee shall take pressure and scrubbing liquid (water) flow rate readings across the wet scrubber controlling the mixing and drying operation, at least once per working shift when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the wet scrubber shall be maintained within the range of 11.0 and 16.0 inches of water and the flow rate for scrubbing liquid shall be maintained within the range of 225 to 275 gallons per minute or a range and flow rate established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading or flow rate is outside of this range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.11 - Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.8 Daily Visible Emission Notations

Daily visible emission notations of the conveyers, material transfers, aggregate storage piles, unpaved roads, and the mixing and drying operation stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processed operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation specified condition prescribing visible emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive

Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.1.9 Wet Scrubber Failure Detection

In the event that the wet scrubber is observed to be operating with a static pressure drop or a liquid flow rate below the low end range for more than two (2) hours during production:

- (a) Troubleshooting shall be implemented and corrective action shall be taken within eight (8) hours of discovery.
- (b) If the corrective action does not correct the problem, then additional corrective actions shall be devised within eight (8) hours of discovery and shall include a timetable for completion.
- (c) For a complete failure of the water supply system to the wet scrubber, the asphalt mixing and drying operations shall be shut down immediately until the supply of water has been restored.

D.1.10 Preventive Inspections

The following inspections shall be performed when the dryer is operating in accordance with the Preventive Maintenance Plan prepared pursuant to Condition B.13:

Daily:

- (a) Inlet gas temperature;
- (b) Outlet gas temperature;
- (c) Liquor recirculation rate;
- (d) Liquor PH;
- (e) Water makeup rate;
- (f) Liquid line blockage; and
- (g) Nozzle blockage and pressure.

Weekly:

- (a) Liquor solids' concentration; and
- (b) Liquor total dissolved solids..

Monthly:

- (a) Instrument air; and
- (b) Valve operation.

D.1.11 Fuel Oil Sampling and Analysis

Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with 326 IAC 3-3-4. If a partially empty fuel tank is refilled, a new sample and analysis is required upon filling. Vendor analysis of each load delivered is acceptable, in lieu of the above, if accompanied by a certification.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.12 Operational Parameters

The Permittee shall maintain a daily record for the cyclone/wet scrubber system controlling particulate matter emissions from asphalt mixing and drying operations of the following values:

- (a) Inlet and outlet differential static pressure;
- (b) Scrubbing liquid flow rate;
- (c) Visible observations;
- (d) Checklist with dates and initials for each preventive action performed; and
- (e) Records of corrective actions.

D.1.13 Oil Usage

- (a) Complete and sufficient records shall be kept to establish compliance with the fuel oil usage limits and sulfur dioxide emission limit established in this permit and contain a minimum of the following:
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual No. 4 fuel oil usage and No. 4 fuel oil equivalence during the period and calculated sulfur dioxide content;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
 - (4) Fuel supplier certifications.
- (b) The supplier certification shall contain, as a minimum, the following:
 - (1) The name of the oil supplier; and
 - (2) A statement from the oil supplier that certifies the sulfur content and heat content of the fuel oil.

D.1.14 Re-refined Waste Oil Usage

Pursuant to 329 IAC 3.1-11 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), the re-refined waste oil burned in the aggregate dryer burner shall meet the used oil specifications in 40 CFR 266.40 (e). Therefore, 40 CFR 266 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), Subpart E (used oil burned for energy recovery), does not apply.

D.1.15 Quarterly Reporting

A quarterly summary to document compliance with operation conditions numbers D.1.2 and D.1.3 shall be submitted, to the address listed in condition C.16 - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

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

FESOP Quarterly Report

Source Name: Phend & Brown, Inc.
 Source Address: Fulton Wabash County Line Road 0.5 mile north of State Road 114 near
 Disko, Indiana 46927
 FESOP No.: F049-6486-03137
 Facility: 75.6 million British thermal units burner for the aggregate dryer
 Parameter: sulfur dioxide
 Limits: sulfur content of No.4 fuel oil and No.2 fuel oil not to exceed 0.50 percent , and
 sulfur content of waste oil not to exceed 1.2 percent ; 2,413,763 gallons of No. 4
 fuel oil and No. 4 fuel oil equivalent combined per last 12-month period. For
 purposes of determining compliance: (a) each gallon of No.2 fuel oil burned is
 equivalent to 0.947 gallons of No. 4 fuel oil burned; and (b) each gallon of waste oil
 burned is equivalent to 2.42 gallons of No. 4 fuel oil burned.

The total amount of No. 4 fuel oil and No. 4 fuel oil equivalence combined shall not
 exceed 201,147 gallons per month for the first 12 months of operation under this
 permit.

Month: _____ Year: _____

Month	Sulfur Content (%)	Heat Content (Btu/gallon)	No. 4 Fuel usage (gal/month)	No. 4 equivalent Fuel usage (gal/month)	No. 4 and No. 4 equivalent Fuel usage last 12 months (gallons)

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
 Deviation has been reported on: _____

Submitted by: _____
 Title/Position: _____
 Signature: _____
 Date: _____

4. Condition D.1.1 has changed from:

D.1.1 Particulate Matter

Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the mixing and drying operation shall not exceed 56.1 pounds per hour.

to include a PM10 limit for the drying operation and be as follows on page 21a:

D.1.1 Particulate Matter

(a) Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the mixing and drying operation shall not exceed 56.1 pounds per hour.

(b) Pursuant to 326 IAC 2-8-4 (FESOP), the PM10 emissions from the mixing and drying operation shall not exceed 21.73 pounds per hour.

The following changes in the Technical Support Document (TSD) for the First Significant Modification should be noted (changes have been bolded for emphasis):

1. The *State Rule Applicability* section has changed from:

State Rule Applicability

There are no changes in State rule applicability from the original FESOP.

And been revised to include a PM10 limit under 326 IAC 2-8-4 to read as follows:

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the input of No. 4 fuel oil to the 52 million Btu per hour burner for the aggregate dryer shall be limited, to 2,633,196 U.S. gallons per twelve (12) month period, rolled on a monthly basis based on a maximum fuel oil sulfur content of 0.486%. For purposes of determining compliance, when backup fuels are burned, the following equivalency calculations shall be performed:

(a) each gallon of No.2 fuel oil burned is equivalent to 0.947 gallons of No. 4 fuel oil burned; and

(b) each gallon of waste oil burned is equivalent to 2.42 gallons of No. 4 fuel oil burned.

The total amount of No. 4 fuel oil and No. 4 fuel oil equivalence combined shall not exceed the limit specified. Therefore, the requirements of 326 IAC 2-7 will not apply.

Pursuant to this rule, the PM10 emissions from the drying and mixing operation shall not exceed 21.73 pounds per hour. This is equivalent to a PM10 limit of 95.17 tons per year for the drying and mixing operation, therefore, the requirements of 326 IAC 2-7 will not apply.

Total Allowable PM10 = 99 tons per year
Total PM10 limited PTE = 13.29 tons per year
Aggregate drying limited PTE = 9.46 tons per year

13.29 - 9.26 = 3.83 tons per year
99 - 3.83 = 95.17 tons per year

95.17 tons per year x 1 ton/2000 pounds x 8760 hours/1 year = 21.73 pounds per hour