Mr. Dean Logan
Rieth Riley Construction Company, Inc.
P.O. Box 477
Goshen, IN 46527-0477

Re: SMF 089-9570
First Significant Modification to FESOP 089-8947
Plt ID 089-03226

Dear Mr. Logan:

Rieth Riley Construction Company, Inc., was issued a Federally Enforceable State Operating Permit (FESOP) on January 6, 1998, for a new 600 ton per hour drum-mix hot asphalt manufacturing plant to be located at 301 N. Cline Avenue, Gary, Indiana, 46406. The Office of Air Management (OAM) has determined that the minor limitation on fuel oil consumption, which is equivalent to sulfur dioxide ($SO_2$) emissions less than 25 tons per year, is not adequate to avoid applicability of 326 IAC 7-4-1.1 (Sulfur dioxide emissions limitations: Lake County). Pursuant to 326 IAC 7-4-1.1, fuel oils cannot be combusted in the aggregate dryer burner. Therefore, all conditions and requirements relating to the combustion of any type of fuel oil in the aggregate dryer burner shall be removed from the FESOP. The hot oil heaters, however, can still burn #2 fuel oil due to their size provided the fuel oil meets the standards specified in 326 IAC 7-4-1.1(a).

Pursuant to the provisions of 326 IAC 2-8-11 (FESOP: Permit Modification), a significant modification to this permit is hereby approved as discussed in the attached Technical Support Document and as described herein:

1. Section A.2 (Emission Units and Pollution Control Equipment Summary), Items (a), (e) and (f), on Page 5 of 45 of the FESOP shall be changed to remove references to fuel oils as follows:

   (a) one (1) aggregate drum dryer, equipped with a low $NO_x$ burner capacity of 200 million British thermal units per hour, exhausting through a baghouse at stack SV1, and having a maximum production capacity of 600 tons per hour. This dryer is fired by natural gas, including ~~#4 residual waste oil, #4 distillate fuel oil, #2 distillate oil, and~~ butane as **a** backup fuel~~s~~;

   (e) one (1) 18,000 gallon liquid storage tank ~~for #4 waste oil or #4 distillate oil~~ venting at stack SV9;

   (f) one (1) 10,000 gallon liquid storage tank ~~for #2 distillate oil~~ venting at stack SV10; and

2. Condition C.1 (Overall Source Limit), Items (a)(1) and (a)(2), on Page 19 of 45 of the FESOP shall be changed as follows:

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit volatile organic compounds (VOCs)~~, sulfur dioxide ($SO_2$),~~ and nitrogen oxides ($NO_x$) from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit particulate matter 10 microns (PM10)**, sulfur dioxide ($SO_2$)** and carbon monoxide (CO) shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period. This shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

3. Item (1) of the facilities description in Section D.1 on Page 30 of 45 of the FESOP shall be changed to remove reference to fuel oils as follows:

(1) one (1) 600 tons per hour drum-mix aggregate dryer, with a low $NO_x$ burner capacity of 200 million British thermal units per hour, exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, including~~ #4 residual waste oil, #4 distillate fuel oil, #2 distillate oil, and~~ butane as **a** backup fuel~~s~~.

4. Conditions D.1.1 (Sulfur Dioxide) and D.1.2 (Used Oil Combustion) on Page 30 of 45 of the FESOP shall be removed.

5. The following condition shall be added as D.1.1 on Page 30 of 45 of the FESOP:

D.1.1 Sulfur Dioxide ($SO_2$) [326 IAC 7-4-1.1]
Pursuant to 326 IAC 7-4-1.1(a), the distillate fuel oil may be combusted in the hot oil heaters provided sulfur dioxide emissions are limited to three-tenths (0.3) pounds per million Btu. For the purpose of determining compliance, the weight percent composition of the distillate oil burned shall not exceed 0.291 percent (%) based on a high heat value of 138,000 Btu per gallon. Compliance with this condition shall also satisfy 326 IAC 7-1.1.

6. Condition D.1.3 (Nitrogen Oxides) on Page 31 of 45 of the FESOP shall be changed to remove references to fuel oils as follows:

Pursuant to 326 IAC 2-8-4**,** the input of natural gas to the aggregate dryer burner shall be limited to 484.32 MMCF per 365-day period, rolled on a daily basis. For purposes of determining compliance based on $NO_x$ emissions every 1000 gallons of butane burned shall be equivalent to 0.2530 MMCF of natural gas~~, each 1000 gallons of #4 waste oil burned shall be equivalent to 0.2289 MMCF of natural gas, every 1000 gallons of #4 distillate oil burned shall be equivalent to 0.8072 MMCF of natural gas, and every 1000 gallons of #2 distillate oil burned shall be equivalent to 0.2410 MMCF of natural gas~~.

7. Condition D.1.16 (Reporting Requirements), Item (a), on Page 34 of 45 of the FESOP shall be removed because it was intended to specify the reporting requirements necessary to demonstrate compliance with the original Condition D.1.1 which was removed as discussed in No. 4, above. The other items in condition D.1.16 shall be renumbered as appropriate.

8. Items (2) and (3) of the facilities description in Section D.2 on Page 35 of 45 of the FESOP shall be changed to remove references to fuel oils as follows:

   (2) one (1) 18,000 gallon liquid storage tank ~~for #4 waste oil or #4 distillate oil~~ venting at stack SV9

   (3) one (1) 10,000 gallon liquid storage tank ~~for #2 distillate oil~~ venting at stack SV10

9. The quarterly report form relating to sulfur dioxide ($SO_2$) emissions on Pages 40 and 41 has been removed from the FESOP.

10. The quarterly report form relating to nitrogen oxides ($NO_x$) emissions on Pages 42 and 43 has been modified to remove the references to fuel oils.

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 FESOP.

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 Janusz Johnson, OAM at the above address; or by phone at 317-232-8325 or 1800-451-6027 (ext. 2-8325).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

JKJ
Attachments: TSD - 3 pages
Modified FESOP pages - 11 pages

cc: File - Lake County
Air Compliance Section Inspector - Ramesh Tejuja
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*

**OFFICE OF AIR MANAGEMENT**
**and Gary Division of Air Pollution Control**

## Rieth Riley Construction Company, Inc.
## 301 North Cline Avenue
## Gary, Indiana 46406

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, 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.

This permit supercedes the previous FESOP No. F089-5554-03226 issued December 9, 1996.

| Operation Permit No.: F089-8947-03226 | |
|---|---|
| Issued by:<br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date:<br>January 6, 1998 |

| First Significant Modification: SMF089-9570 | Pages Affected: 5, 19, 30, 31, 34, 35, 40, 41, 42, and 43 |
|---|---|
| Issued by:<br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date: |

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM), and the Gary Local Agency**,** and presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary drum-mix asphalt plant with a maximum production capacity of 600 tons per hour.

| | |
|---|---|
| Responsible Official: | Dean K. Logan |
| Source Address: | 301 N. Cline Avenue, Gary, Indiana 46406 |
| Mailing Address: | P.O. Box 477, Goshen, IN 46527-0477 |
| SIC Code: | 2951 |
| County Location: | Lake County |
| County Status: | Primary nonattainment for carbon monoxide, particulate matter, sulfur dioxide; moderate nonattainment for particulate matter 10 microns; severe nonattainment for volatile organic compounds |
| Source Status: | Minor Source, Emission Offset Rules;<br>Synthetic Minor Source, Part 70 Permit Program |

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) one (1) aggregate drum dryer, equipped with a low $NO_x$ burner capacity of 200 million British thermal units per hour, exhausting through a baghouse at stack SV1, and having a maximum production capacity of 600 tons per hour. This dryer is fired by natural gas, including butane as a backup fuel;

(b) two (2) hot oil heaters, fired by #2 distillate oil with propane as a backup fuel. These heaters are rated at 2.0 and 2.256 million British thermal units per hour and exhaust at stacks SV2 and SV3, respectively;

(c) four (4) 12,500 gallon liquid storage tanks for liquid asphalt venting at stacks SV4, SV5, SV6 and SV7;

(d) one (1) 25,000 gallon liquid storage tank for liquid asphalt venting at stack SV8;

(e) one (1) 18,000 gallon liquid storage tank venting at stack SV9;

(f) one (1) 10,000 gallon liquid storage tank at stack SV10; and

(g) one (1) baghouse with a total filter area of 21,240 $ft^2$.

# SECTION C SOURCE OPERATION CONDITIONS

Entire Source

**Emissions Limitations and Standards [326 IAC 2-8-4(1)]**

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit volatile organic compounds (VOCs) and nitrogen oxides ($NO_x$) from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit particulate matter 10 microns (PM10), sulfur dioxides ($SO_2$) and carbon monoxide (CO) shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period. This shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(3) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per three hundred sixty-five (365) consecutive day period; and

(4) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of twenty percent (20%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

This condition is not federally enforceable.

**SECTION D.1 FACILITY OPERATION CONDITIONS**

| | |
|---|---|
| **(1)** | one (1) 600 tons per hour drum-mix aggregate dryer, with a low $NO_x$ burner capacity of 200 million British thermal units per hour, exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, including butane as a backup fuel. |
| **(2)** | two (2) hot oil heaters, fired by #2 distillate oil with propane as backup fuel. The heaters are rated at 2.0 and 2.256 million British thermal units per hour and exhaust at stacks SV2 and SV3, respectively. |
| **(3)** | one (1) baghouse with a total filter area of 21,240 $ft^2$. |

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.1.1 Sulfur Dioxide ($SO_2$) [326 IAC 7-4-1.1]

Pursuant to 326 IAC 7-4-1.1(a), the distillate fuel oil may be combusted in the hot oil heaters provided sulfur dioxide emissions are limited to three-tenths (0.3) pounds per million Btu. For the purpose of determining compliance, the weight percent composition of the distillate oil burned shall not exceed 0.291 percent (%) based on a high heat value of 138,000 Btu per gallon. Compliance with this condition shall also satisfy 326 IAC 7-1.1.

D.1.3 Nitrogen Oxides ($NO_x$)

Pursuant to 326 IAC 2-8-4**,** the input of natural gas to the aggregate dryer burner shall be limited to 484.32 MMCF per 365-day period, rolled on a daily basis. For purposes of determining compliance based on $NO_x$ emissions every 1000 gallons of butane burned shall be equivalent to 0.2530 MMCF of natural gas.

This fuel usage limitation was taken voluntarily by the company and is equivalent to nitrogen oxides emissions of 20.1 tons per 365-day period, rolled on a daily basis. Due to this usage limit, the Part 70 Permit Program (326 IAC 2-7) and Emission Offset (326 IAC 2-3) rules do not apply.

D.1.4 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) particulate matter emissions from the asphalt plant shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf). This emission limitation is equivalent to 20.04 pounds per hour based on an exhaust rate of 119,086 acfm and an exhaust temperature of 250 degrees Fahrenheit.

D.1.5 Particulate Matter (PM) [326 IAC 12]

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I), particulate matter emissions from the asphalt plant shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf), and the visible emissions from the plant shall not exceed 20 percent opacity. This emission limitation is equivalent to 26.72 pounds per hour based on an exhaust rate of 119,086 acfm and an exhaust temperature of 250 degrees Fahrenheit. Compliance with 326 IAC 6-1-2, 326 IAC 5-1, and 326 IAC 6-1-11.1 will satisfy this rule.

D.1.6 Particulate Matter (PM) and Particulate Matter 10 Microns (PM-10)

Pursuant to 326 IAC 2-8-4, emissions of particulate matter and particulate matter 10 microns or less in diameter (PM10) from the aggregate dryer/mixer shall not exceed 20.04 pounds per hour, including both filterable and condensible fractions. Compliance with this limit and D.1.7 will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.7 Emission Offset Minor Limit [326 IAC 2-3]

Pursuant to 326 IAC 2-3, the production of asphalt concrete shall be limited to 1,982,153 tons per 365-day period, rolled on a daily basis. This production limitation was taken voluntarily by the company and is equivalent to particulate matter emissions of 33.1 tons per 365-day period, rolled on a daily basis. Due to this production limit, D.1.6, and that the company shall dismantle and cease to operate the existing aggregate dryer and dryer burner, 326 IAC 2-3 (Emission Offset) and the Part 70 (326 IAC 2-7) rules do not apply.

D.1.8 Volatile Organic Compounds (VOC)

The VOC usage in the production of cold mix cutback asphalt shall be limited to 22.1 tons per year. This is equivalent to 718 tons of liquid binder used per year in the production of cold mix cutback asphalt based on 5.0 percent diluent present in the asphalt. Due to the above limit, 326 IAC 2-3 (Emission Offset) and the Part 70 rules (326 IAC 2-7) do not apply.

D.1.9 Volatile Organic Compounds (VOC) [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) oil distillate by volume of emulsion for any paving application except:

(v) Fuel supplier certifications.

The fuel supplier certification shall contain, as a minimum, the following:

(i) The name of the fuel supplier; and

(ii) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

D.1.16 Reporting Requirements

(a) Quarterly summary to document compliance with operation condition number D.1.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall include the amounts of fuels used and the 365 day rolling total of fuel usage in the quarter.

(b) Quarterly summary to document compliance with operation condition number D.1.7 shall be submitted to the addresses listed in Section C - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall include the 365 day rolling total of asphalt concrete produced in the quarter.

**SECTION D.2 FACILITY OPERATION CONDITIONS**

| | |
|---|---|
| (1) | four (4) 12,500 gallon liquid storage tanks for liquid asphalt venting at stacks SV4, SV5, SV6 and SV7 |
| (2) | one (1) 18,000 gallon liquid storage tank venting at stack SV9 |
| (3) | one (1) 10,000 gallon liquid storage tank venting at stack SV10 |
| (4) | one (1) 25,000 gallon liquid storage tank for liquid asphalt venting at stack SV8 |

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.2.1 Volatile Liquid Storage Tanks [326 IAC 12]

Pursuant to New Source Performance Standard (NSPS), 326 IAC 12 (40 CFR Part 60.116b only, Subpart Kb), the permittee shall maintain accessible records for the 25,000 gallon liquid storage tank only. These records shall include the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tank.

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**Indiana Department of Environmental Management - Office of Air Management - Compliance Data Section**

## and Gary Air and Land Pollution Control

**Quarterly Report of 365-day Daily Rolling Total**

Company Name: Rieth Riley Construction Co., Inc.
Location: 301 N. Cline Avenue, Gary, Indiana
Permit No.: F089-8947-03226
Source/Facility: aggregate dryer burner
Pollutant: nitrogen oxides ($NO_X$)

**Month:** _____ **Year:** _____

| day | natural gas Usage (MMCF/day) | butane Usage (gals/day) | natural gas equivalent (0.2530 x butane usage) | Total natural gas/equivalents usage this day (MMCF/day) | Total natural gas/equivalents usage last 365 days (MMCF/365 days) | natural gas LIMIT (MMCF/365 days) |
|---|---|---|---|---|---|---|
| 1 | | | | | | 484.32 |
| 2 | | | | | | 484.32 |
| 3 | | | | | | 484.32 |
| 4 | | | | | | 484.32 |
| 5 | | | | | | 484.32 |
| 6 | | | | | | 484.32 |
| 7 | | | | | | 484.32 |
| 8 | | | | | | 484.32 |
| 9 | | | | | | 484.32 |
| 10 | | | | | | 484.32 |
| 11 | | | | | | 484.32 |
| 12 | | | | | | 484.32 |
| 13 | | | | | | 484.32 |
| 14 | | | | | | 484.32 |
| 15 | | | | | | 484.32 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | | | | | | 484.32 |
| 17 | | | | | | 484.32 |
| 18 | | | | | | 484.32 |
| 19 | | | | | | 484.32 |
| 20 | | | | | | 484.32 |
| 21 | | | | | | 484.32 |
| 22 | | | | | | 484.32 |
| 23 | | | | | | 484.32 |
| 24 | | | | | | 484.32 |
| 25 | | | | | | 484.32 |
| 26 | | | | | | 484.32 |
| 27 | | | | | | 484.32 |
| 28 | | | | | | 484.32 |
| 29 | | | | | | 484.32 |
| 30 | | | | | | 484.32 |
| 31 | | | | | | 484.32 |

**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 Modification to Federally Enforceable State Operating Permit (FESOP)

| | |
|---|---|
| Source Name: | Rieth Riley Construction Co., Inc. |
| Source Location: | 301 N. Cline Avenue, Gary, IN |
| County: | Lake |
| SIC Code: | 2951 |
| Significant Modification No.: | SMF089-9570 |
| Permit Reviewer: | JKJ |

A FESOP (F089-8947-3226) was issued to Rieth Riley Construction Company on January 6, 1998, for a new 600 ton per hour drum-mix hot asphalt manufacturing plant which replaced the existing 300 ton per hour batch-mix plant. During the review of this application, the applicability of 326 IAC 7-4-1.1 (Sulfur dioxide emissions limitations: Lake County) was determined to prohibit the source from being able to combust fuel oil in the aggregate dryer burner. In the existing FESOP, the source agreed to take a minor limit on the amount of fuel oil combusted in the burner such that the rule would not apply and the source could burn some fuel oil.

The OAM has determined that the minor limitation on sulfur dioxide ($SO_2$) emissions given in the permit (equivalent to $SO_2$ emissions less than 25 tons per year will not be adequate to avoid applicability of 326 IAC 7-4-1.1 because the rules applicability is also triggered for $SO_2$ emissions greater than ten (10) pounds per hour. Further discussion of this issue with the source has indicated that a minor limitation of less than 10 pounds $SO_2$ per hour would be infeasible to operate under. Therefore, the FESOP shall be modified to state that the rule applies and to remove all conditions and requirements relating to the combustion of any type of fuel oil in the aggregate dryer burner. The hot oil heaters will still be allowed to burn #2 fuel oil as discussed in the State Rules section of this TSD.

**Limited PTE**

Based on the revisions discussed above, the following is a revised Limited PTE analysis:

(a) The source has accepted a federally enforceable limit on potential to emit particulate matter (PM) of 178.6 tons per year, consisting of:

(i) 33.1 tons per year for the drum-mix aggregate dryer/burner; and

(ii) 145.5 tons per year for the other, unlimited and uncontrolled, activities.

This federally enforceable limit on potential to emit particulate matter (PM) also constrains the potential to emit particulate matter with a diameter of 10 microns or less (PM10) to 82.4 tons per year, consisting of:

(i) 33.1 tons per year for the drum-mix aggregate dryer/burner; and

(ii) 49.3 tons per year for the other, unlimited and uncontrolled, activities.

For the purpose of Emission Offset (326 IAC 2-3) applicability, control of fugitive dust from unpaved roads and storage piles is considered in determining limited emissions of 109.2 tons per year as follows:

(i) 33.1 tons per year for the drum-mix aggregate dryer/burner; and

(ii) 76.1 tons per year for the other, unlimited but controlled, activities.

The modifications to this source involved replacement of the existing batch-mix asphalt dryer and burner which had past actual PM emissions of 10.2 tons per year on average for the past two (2) years. Based on the limited emissions including fugitive dust control, the net emissions increase for these modifications is 99.0 tons per year. Therefore, Emission Offset (326 IAC 2-3) rules do not apply.

~~(b) The source has accepted a federally enforceable limit on potential to emit sulfur dioxide ($SO_2$) of 24 tons per year, consisting of:~~

~~(i) 14.5 tons per year for the aggregate dryer burner; and~~

~~(ii) 9.5 tons per year for the other, unlimited, activities.~~

(c) The source has accepted a federally enforceable limit on potential to emit volatile organic compounds (VOCs) of 24 tons per year, consisting of:

(i) 22.1 tons per year for the production of cutback asphalt; and

(ii) 1.9 tons per year for the other, unlimited, activities.

(d) The source has accepted a federally enforceable limit on potential to emit nitrogen oxides ($NO_x$) of 24 tons per year, consisting of:

(i) 20.1 tons per year for the aggregate dryer burner; and

(ii) 3.9 tons per year for the other, unlimited, activities.

(e) The table on the next page summarizes the total limited potential to emit of the significant and insignificant emission units.

| | Limited PTE (tons/year) | | | | | | |
|---|---|---|---|---|---|---|---|
| Process/ facility | PM | PM-10 | SO2 | VOC | CO | NOx | HAPs |
| drum dryer & burner | 33.1 | 33.1 | 0.1 | 0.7 | 9.7 | 20.1 | 15.2 |
| conveying/handling | 6.6 | 0.7 | - | - | - | - | - |
| storage piles * | 1.1 | 0.4 | - | - | - | - | - |
| unpaved roads * | 137.5 | 48.1 | - | - | - | - | - |
| hot oil heater | 0.3 | 0.1 | 9.5 | 0.1 | 0.7 | 3.9 | - |
| cutback asphalt | - | - | - | 22.1 | - | - | - |
| Total Emissions | 178.6 | 82.4 | 9.6 | 23.0 | 10.4 | 24.0 | 15.2 |

* For the purposes of Part 70 review, fugitive dust controls have not been included in this limited PTE table.

**Enhanced New Source Review**

This modification has no increase in emissions associated with it and therefore does not need to be reviewed pursuant to the requirements for Enhanced New Source Review (ENSR), 326 IAC 2-1-3.2.

**Federal Rule Applicability**

There are no changes in Federal rule applicability due to this modification.

**State Rule Applicability**

The following State rules are affected by this modification:

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

This rule applies because potential emissions from the aggregate dryer burner when burning fuel oil would be greater than 25 tons per year and 10 pounds per hour. This rule requires levels of sulfur dioxide emissions from the combustion of #2 distillate fuel oil not to exceed 0.5 pounds per million Btu (lb/MMBTU) heat input. Compliance with 326 IAC 7-4-1.1(a) below shall satisfy this rule.

326 IAC 7-4-1.1 (Sulfur Dioxide Emission Limitations: Lake County)

Pursuant to this rule, all fossil fuel combustion sources and facilities subject to 326 IAC 7-1.1-2 (above) located in Lake County shall burn natural gas only. Therefore, fuel oil shall not be combusted in the aggregate dryer burner.

Pursuant to 326 IAC 7-4-1.1(a), the source may burn distilllate oil with sulfur dioxide emissions limited to three-tenths (0.3) pounds per million Btu if the fuel combustion unit has a maximum capacity of less than twenty (20) million Btu per hour actual heat input. Therefore, distillate fuel oil can be combusted in the hot oil heaters provided the sulfur content of the fuel does not exceed 0.291 percent sulfur by weight based on a higher heating value of 138,000 Btu per gallon.

**FESOP Changes**

1. Section A.2 (Emission Units and Pollution Control Equipment Summary), Items (a), (e) and (f), on Page 5 of 45 of the FESOP shall be changed to remove references to fuel oils as follows:

   (a) one (1) aggregate drum dryer, equipped with a low $NO_x$ burner capacity of 200 million British thermal units per hour, exhausting through a baghouse at stack SV1, and having a maximum production capacity of 600 tons per hour. This dryer is fired by natural gas, including ~~#4 residual waste oil, #4 distillate fuel oil, #2 distillate oil, and~~ butane as **a** backup fuel~~s~~;

   (e) one (1) 18,000 gallon liquid storage tank ~~for #4 waste oil or #4 distillate oil~~ venting at stack SV9;

   (f) one (1) 10,000 gallon liquid storage tank ~~for #2 distillate oil~~ venting at stack SV10; and

2. Condition C.1 (Overall Source Limit), Items (a)(1) and (a)(2), on Page 19 of 45 of the FESOP shall be changed as follows:

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit volatile organic compounds (VOCs)~~, sulfur dioxide ($SO_2$),~~ and nitrogen oxides ($NO_x$) from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit particulate matter 10 microns (PM10)**, sulfur dioxide ($SO_2$)** and carbon monoxide (CO) shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period. This shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

3. Item (1) of the facilities description in Section D.1 on Page 30 of 45 of the FESOP shall be changed to remove reference to fuel oils as follows:

(1) one (1) 600 tons per hour drum-mix aggregate dryer, with a low $NO_x$ burner capacity of 200 million British thermal units per hour, exhausting through a baghouse at stack SV1. This dryer is fired by natural gas, including~~ #4 residual waste oil, #4 distillate fuel oil, #2 distillate oil, and~~ butane as **a** backup fuel~~s~~.

4. Conditions D.1.1 (Sulfur Dioxide) and D.1.2 (Used Oil Combustion) on Page 30 of 45 of the FESOP shall be removed.

5. The following condition shall be added as D.1.1 on Page 30 of 45 of the FESOP:

D.1.1 Sulfur Dioxide ($SO_2$) [326 IAC 7-4-1.1]
Pursuant to 326 IAC 7-4-1.1(a), the distillate fuel oil may be combusted in the hot oil heaters provided sulfur dioxide emissions are limited to three-tenths (0.3) pounds per million Btu. For the purpose of determining compliance, the weight percent composition of the distillate oil burned shall not exceed 0.291 percent (%) based on a high heat value of 138,000 Btu per gallon. Compliance with this condition shall also satisfy 326 IAC 7-1.1.

6. Condition D.1.3 (Nitrogen Oxides) on Page 31 of 45 of the FESOP shall be changed to remove references to fuel oils as follows:

Pursuant to 326 IAC 2-8-4**,** the input of natural gas to the aggregate dryer burner shall be limited to 484.32 MMCF per 365-day period, rolled on a daily basis. For purposes of determining compliance based on $NO_x$ emissions every 1000 gallons of butane burned shall be equivalent to 0.2530 MMCF of natural gas~~, each 1000 gallons of #4 waste oil burned shall be equivalent to 0.2289 MMCF of natural gas, every 1000 gallons of #4 distillate oil burned shall be equivalent to 0.8072 MMCF of natural gas, and every 1000 gallons of #2 distillate oil burned shall be equivalent to 0.2410 MMCF of natural gas~~.

7. Condition D.1.16 (Reporting Requirements), Item (a), on Page 34 of 45 of the FESOP shall be removed because it was intended to specify the reporting requirements necessary to demonstrate compliance with the original Condition D.1.1 which was removed as discussed in No. 4, above. The other items in condition D.1.16 shall be renumbered as appropriate.

8. Items (2) and (3) of the facilities description in Section D.2 on Page 35 of 45 of the FESOP shall be changed to remove references to fuel oils as follows:

   (2) one (1) 18,000 gallon liquid storage tank ~~for #4 waste oil or #4 distillate oil~~ venting at stack SV9

   (3) one (1) 10,000 gallon liquid storage tank ~~for #2 distillate oil~~ venting at stack SV10

9. The quarterly report form relating to sulfur dioxide ($SO_2$) emissions on Pages 40 and 41 has been removed from the FESOP.

10. The quarterly report form relating to nitrogen oxides ($NO_x$) emissions on Pages 42 and 43 has been modified to remove the references to fuel oils.

**Air Toxic Emissions**

There will be no increase in the air toxic emissions as a result of this modification.

**Conclusion**

The modifications to the FESOP for this source will be subject to the conditions of the attached proposed **FESOP Significant Modification Permit No. SMF-089-9570**.