

Mr. Jeffrey Keenan
West Fork Land Development Company, L.L.C.
1400 Smith Street
Houston, TX 77002

Re: 083-11659
Notice-only change to
MSOP 083-10726-00041

Dear Mr. Keenan:

West Fork Land Development Company, L.L.C. was issued a minor source operating permit on October 25, 1999 for a 540 MW merchant power plant. A letter notifying the Office of Air Management of the addition of an emergency generator was received on December 16, 1999. Pursuant to the provisions of 326 IAC 2-6.1-6 the permit is hereby revised as follows:

1. The source descriptions listed under Section A.2, page 4 of 25, and Section D.1, page 17 of 25, are revised as follows to reflect the new unit (changes are bolded and stricken out for emphasis):
 - (a) Four (4) natural gas-fired combustion turbines, designated as turbine units EU-01 through EU-04, with an anticipated maximum heat input capacity of 1,351 mmBtu/hr (Lower Heating Value, LHV) per turbine unit, with water-injection for NO_x emissions control and exhaust to four(4) stacks designated as S-001 through S-004.
 - (b) One (1) natural gas-fired heater, designated as EU-05, with a maximum heat input capacity of 9 mmBtu/hr and exhausts to a stack designated as S-005.
 - (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.
 - (d) **One (1) diesel-fired emergency generator, designated as EU-07, with a maximum heat input capacity of 0.5 mmBtu/hr and exhausts to one (1) stack designated as S-007.**
2. Condition D.1.1, NO_x and CO Limitations listed on page 17 of 25, is revised to reflect the addition of the new unit yet maintain the same NO_x and CO emission limitations. This revision also reflects a change in the permitted language. The OAM changed the specific emission factor tables originally listed in the MSOP to "appropriate AP-42 emission factors" due to any possible changes which may be made to the AP-42 tables by the USEPA. The revision is as follows (changes are bolded and stricken out for emphasis):

- (a) The potential to emit of CO and NOx from the four (4) combustion turbines, one (1) natural gas heater, ~~and one~~(1) diesel engine **and one (1) emergency generator** shall be limited to less than 250 tons per twelve (12) consecutive months per pollutant, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.
- (b) The emissions shall be limited by the following equations:
 - (1) NOx emissions (tons per year) = Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * **appropriate** AP-42 emission factors ~~from Tables 1.4-1 through 1.4-2~~ + diesel fuel usage from engine (gals/yr) * **appropriate** AP-42 emission factors ~~from Tables 3.3-1 + diesel fuel usage from generator (gals/yr) * appropriate AP-42 emission factors.~~
 - (2) CO emissions (tons per year) = Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * **appropriate** AP-42 emission factors ~~from Tables 1.4-1 through 1.4-2~~ + diesel fuel usage from engine (gals/yr) * **appropriate** AP-42 emission factors ~~from Tables 3.3-1 + diesel fuel usage from generator (gals/yr) * appropriate AP-42 emission factors.~~
- 3. Condition D.1.10(b), page 20 of 25, is revised as follows to reflect the required record keeping of the new unit (changes are bolded and stricken out for emphasis):
 - (b) To document compliance with Condition D.1.1, the Permittee shall maintain records of the following:
 - (1) amounts of fuel combusted during each month for each unit (in SCF for heater and in gallons for diesel engine **and emergency generator**); and
 - (2) the heat input capacity of each unit.
- 4. The reporting forms for NOx and CO emissions, listed on pages 23 and 24 of 25, are revised to reflect the addition of the new unit. Please note the "xx" is either equivalent to

NOx or CO.

Month	xx Emissions (tons/month)				Total xx Emissions for previous eleven months (tons/month)	Total xx Emissions for twelve month period (tons)
	Four (4) turbines	One (1) heater	One (1) fire-water pump engine	One (1) emergency generator		
1						
2						
3						

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this letter and the following revised permit pages 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 Nysa L. James, at OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Nysa L. James or extension 3-6875, or dial (317) 233-6875.

Sincerely,

Paul Dubenetzky, Chief
 Permits Branch
 Office of Air Management

Attachments

NLJ

- cc: File - Knox County
- U.S. EPA, Region V
- Knox County Health Department
- Air Compliance Section Inspector - Gene Kelso
- Compliance Data Section - Karen Nowak
- Administrative and Development - Janet Mobley
- Technical Support and Modeling - Michele Boner

**NEW SOURCE CONSTRUCTION and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR MANAGEMENT**

**West Fork Land Development Company, L.L.C.
480 North Hall Road,
Wheatland, Indiana 47597**

(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 permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, (326 IAC 2-5.1 if new source), 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: MSOP-083-10726-00041	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: October 25, 1999
First Notice Only Change: 083-11659	Pages Affected: 4, 17, 20, 23 and 24
Issued by: Paul Dubenetzky, Branch Chief 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). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.10-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a merchant power plant.

Responsible Official: Michael J. Miller
Source Address: 480 North Hall Road, Wheatland, Indiana 47597
Mailing Address: 1400 Smith Street, Houston, Texas 77002
SIC Code: 4911
County Location: Knox
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary

This construction permit consists of the following emission units and pollution control devices:

- (a) Four (4) natural gas-fired combustion turbines, designated as turbine units EU-01 through EU-04, with an anticipated maximum heat input capacity of 1,351 mmBtu/hr (Lower Heating Value, LHV) per turbine unit, with water-injection for NO_x emissions control and exhaust to four (4) stacks designated as S-001 through S-004.
- (b) One (1) natural gas-fired heater, designated as EU-05, with a maximum heat input capacity of 9 mmBtu/hr and exhausts to a stack designated as S-005.
- (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.
- (d) One (1) diesel-fired emergency generator, designated as EU-07, with a maximum heat input capacity of 0.5 mmBtu/hr and exhausts to one (1) stack designated as S-007.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source will be 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) This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

A.4 Acid Rain Permit Applicability [326 IAC 2-7-2]

This stationary source shall be required to have a Phase II, Acid Rain permit by 40 CFR Part 72.30 (Applicability) because:

- (a) The combustion turbines are new units under 40 CR Part 72.6.
- (b) The source cannot operate the combustion units until their Phase II, Acid Rain permit has been issued.

SECTION D.1

FACILITY CONDITIONS

- (a) Four (4) natural gas-fired combustion turbines, designated as turbine units EU-01 through EU-04, with an anticipated maximum heat input capacity of 1,351 mmBtu/hr (Lower Heating Value, LHV) per turbine unit, with water-injection for NO_x emissions control and exhaust to four(4) stacks designated as S-001 through S-004.
- (b) One (1) natural gas-fired heater, designated as EU-05, with a maximum heat input capacity of 9 mmBtu/hr and exhausts to a stack designated as S-005.
- (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.
- (d) One (1) diesel-fired emergency generator, designated as EU-07, with a maximum heat input capacity of 0.5 mmBtu/hr and exhausts to one (1) stack designated as S-007.

The information describing the source contained in this Section D.1 is descriptive information, and does not constitute federally enforceable conditions.

Emissions Limitation and Standards

D.1.1 NO_x and CO Limitations [326 IAC 2-2]

- (a) The potential to emit of CO and NO_x from the four (4) combustion turbines, one (1) natural gas heater and one(1) diesel engine shall be limited to less than 250 tons per twelve (12) consecutive months per pollutant, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.
- (b) The emissions shall be limited by the following equations:
 - (1) NO_x emissions (tons per year) = Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * appropriate AP-42 emission factors + diesel fuel usage from engine (gals/yr) * appropriate AP-42 emission factors + diesel fuel usage from generator (gals/yr) * appropriate AP-42 emission factors.
 - (2) CO emissions (tons per year) = Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * appropriate AP-42 emission factors + diesel fuel usage from engine (gals/yr) * appropriate AP-42 emission factors + diesel fuel usage from generator (gals/yr) * appropriate AP-42 emission factors.

D.1.2 40 CFR Part 60, Subpart GG Applicability (Stationary Gas Turbines)

- (a) The four (4) combustion turbines are subject to 40 CFR Part 60, Subpart GG because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

Procedures outlined in 40 CFR Part 75, Subpart D to demonstrate compliance with the NO_x limit, established under Condition D.1.1.

- (e) After operation at worst case conditions (based on 57 °F and 75% load for CO), the source may submit to OAM alternative emission factors and their corresponding temperatures to use in lieu of the AP-42 emission factors in instances of downtime. The alternative emissions factors must be approved by OAM prior to use in calculating emissions for the limitations established in this construction permit. The alternative emission factors shall be based upon collected monitoring and test data supplied from an approved continuous emission monitoring system and/or approved performance tests. In the event that the information submitted does not contain sufficient data to establish appropriate emission factors, the source shall continue to collect data until appropriate emission factors can be established. During this period of time, the source shall continue to use AP-42 emission factors for CO and the NO_x Missing Data Substitution Procedures specified in 40 CFR Part 75, Subpart D, in periods of downtime.

Record Keeping and Reporting Requirements [326 IAC 2-1-3]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records required under 326 IAC 3-5-6 at the source in a manner so that they may be inspected by the IDEM, OAM, or the U.S. EPA., if so requested or required.
- (b) To document compliance with Condition D.1.1, the Permittee shall maintain records of the following:
 - (1) amounts of fuel combusted during each month for each unit (in SCF for heater and in gallons for diesel engine and emergency generator); and
 - (2) the heat input capacity of each unit.
- (c) To document compliance with D.1.2, the source shall maintain records of the natural gas analyses, including the sulfur and nitrogen content of the gas, for a period of three (3) years.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

- (a) The Permittee shall submit a quarterly excess emissions report, if applicable, based on the continuous emissions monitor (CEM) data for NO_x and CO, pursuant to 326 IAC 3-5-7. These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with condition C.21 - General Reporting Requirements of this permit.
-
- (b) A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, 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**

Quarterly Report

Company Name: West Fork Land Development Company, L.L.C.
 Location: 480 North Hall Road, Wheatland, Indiana 47597
 Permit No.: 083-10726-00041
 Source: Four (4) combustion turbines (1,351 mmBtu/hr per turbine), one (1) natural gas-fired heater, one (1) diesel-fired engine and one (1) emergency generator
 Pollutant: CO
 Limit: Less than 250 tons per twelve (12) consecutive month period

Year: _____

Month	CO Emissions (tons/month)				Total CO Emissions for previous eleven months (tons/month)	Total CO Emissions for twelve month period (tons)
	Four (4) turbines	One (1) heater	One (1) fire-water pump engine	One (1) emergency generator		
1						
2						
3						

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

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

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

Quarterly Report

Company Name: West Fork Land Development Company, L.L.C.
 Location: 480 North Hall Road, Wheatland, Indiana 47597
 Permit No.: 083-10726-00041
 Source: Four (4) combustion turbines (1,351 mmBtu/hr per turbine), one (1) natural gas-fired heater, one (1) diesel-fired engine and one (1) emergency generator
 Pollutant: NOx
 Limit: Less than 250 tons per twelve (12) consecutive month period

Year: _____

Month	NOx Emissions (tons/month)				Total NOx Emissions for previous eleven months (tons/month)	Total NOx Emissions for twelve month period (tons)
	Four (4) turbines	One (1) heater	One (1) fire-water pump engine	One (1) emergency generator		
1						
2						
3						

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

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

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Notice Only Change to a Minor Source Operating Permit

Source Background and Description

Source Name:	West Fork Land Development Company, L.L.C.
Source Location:	480 North Hall Road, Wheatland, Indiana 47597
County:	Knox
SIC Code:	4911
Operation Permit No.:	MSOP 083-10726-00041
Operation Permit Issuance Date:	October 25, 1999
Notice Only Change No.:	083-11659-00041
Permit Reviewer:	Nysa L. James

The Office of Air Management (OAM) has reviewed a letter requesting the addition of an emergency generator from West Fork Land Development Company, L.L.C..

History

On December 16, 1999, West Fork Land Development Company, L.L.C. submitted an application to the OAM requesting to add an emergency diesel-fired generator. West Fork Land Development Company, L.L.C. was issued a New Construction and Minor Source Operating Permit on October 25, 1999.

Existing Approvals

The source was issued a New Construction and Minor Source Operating Permit (083-10726-00041) on October 25, 1999.

Changes Proposed

The Office of Air Management (OAM) has reviewed an application from West Fork Land Development Company, L.L.C., relating to a notice only change to their MSOP. The notice only change consists of the addition of an emergency generator. West Fork Land Development Company, L.L.C. requests such addition to the source because their electrical interconnection host utility requires a back-up safety feature to warm the circuit breakers and prevent freezing of switches at the source. The source is proposing the following changes (changes are bolded and stricken out for emphasis):

1. The source descriptions listed under Section A.2, page 4 of 25, and Section D.1, page 17 of 25, are revised as follows to reflect the new unit (changes are bolded and stricken out for emphasis):
 - (a) Four (4) natural gas-fired combustion turbines, designated as turbine units EU-01 through EU-04, with an anticipated maximum heat input capacity of 1,351 mmBtu/hr (Lower Heating Value, LHV) per turbine unit, with water-injection for NO_x emissions control and exhaust to four(4) stacks designated as S-001 through S-004.

- (b) One (1) natural gas-fired heater, designated as EU-05, with a maximum heat input capacity of 9 mmBtu/hr and exhausts to a stack designated as S-005.
- (c) One (1) diesel engine, utilized to operate an emergency fire water pump, designated as EU-06, with a maximum heat input capacity of 1.3 mmBtu/hr and exhausts to a stack designated as S-006.
- (d) **One (1) diesel-fired emergency generator, designated as EU-07, with a maximum heat input capacity of 0.5 mmBtu/hr and exhausts to one (1) stack designated as S-007.**

2. Condition D.1.1, NOx and CO Limitations listed on page 17 of 25, is revised to reflect the addition of the new unit yet maintain the same NOx and CO emission limitations. This revision also reflects a change in the permitted language. The OAM changed the specific emission factor tables originally listed in the MSOP to “appropriate AP-42 emission factors” due to any possible changes which may be made to the AP-42 tables by the USEPA. The revision is as follows (changes are bolded and stricken out for emphasis):

(a) The potential to emit of CO and NOx from the four (4) combustion turbines, one (1) natural gas heater, ~~and one(1) diesel engine~~ **and one (1) emergency generator** shall be limited to less than 250 tons per twelve (12) consecutive months per pollutant, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

(b) The emissions shall be limited by the following equations:

(1) NOx emissions (tons per year) = Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * **appropriate** AP-42 emission factors ~~from Tables 1.4-1 through 1.4-2~~ + diesel fuel usage from engine (gals/yr) * **appropriate** AP-42 emission factors ~~from Tables 3.3-1 + diesel fuel usage from generator (gals/yr) * appropriate AP-42 emission factors.~~

(2) CO emissions (tons per year) = Emissions from combustion turbines (tons per year, based on CEMs data) + natural gas usage from heater (MMCF/yr) * **appropriate** AP-42 emission factors ~~from Tables 1.4-1 through 1.4-2~~ + diesel fuel usage from engine (gals/yr) * **appropriate** AP-42 emission factors ~~from Tables 3.3-1 + diesel fuel usage from generator (gals/yr) * appropriate AP-42 emission factors.~~

factors.

3. Condition D.1.10(b), page 20 of 25, is revised as follows to reflect the required record keeping of the new unit (changes are bolded and stricken out for emphasis):
 - (b) To document compliance with Condition D.1.1, the Permittee shall maintain records of the following:
 - (1) amounts of fuel combusted during each month for each unit (in SCF for heater and in gallons for diesel engine **and emergency generator**); and
 - (2) the heat input capacity of each unit.
4. The reporting forms for NOx and CO emissions, listed on pages 23 and 24 of 25, are revised to reflect the addition of the new unit. Please note the "xx" is either equivalent to NOx or CO.

Month	xx Emissions (tons/month)				Total xx Emissions for previous eleven months (tons/month)	Total xx Emissions for twelve month period (tons)
	Four (4) turbines	One (1) heater	One (1) fire-water pump engine	One (1) emergency generator		
1						
2						
3						

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S-007	emergency generator	6.83	0.25	348.4	980

Recommendation

The staff recommends to the Commissioner that the Notice Only Change 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 December 16, 1999. Additional information was received on February 3, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations. (Page 4 of 4). The page numbers of the other three (3) pages of original emission calculations are revised to reflect the addition of the new unit. Revised copies of the three (3) pages plus the new emission unit calculations are attached to this technical support document.

Potential To Emit (Emergency Generator)

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

Pollutant	Potential To Emit (tons/year)
PM	0.7
PM-10	0.7
SO ₂	0.6
VOC	0.8
CO	2.1
NO _x	9.7

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Benzene	2.04E-03
Toluene	8.96E-04
Xylene	6.24E-04
Propylene	5.65E-04
Formaldehyde	2.58E-04
Acetaldehyde	1.68E-03
Acrolein	2.03E-04
1,3 Butadiene	8.56E-05
Total PAH	3.68E-04
TOTAL	6.72E-03

Since the potential to emit of NO_x, SO₂ and VOC is less than ten (10) tons per year, PM and PM₁₀ is less than five (5) tons per year and CO is less than 100 tons per year and the only change is descriptive information, a notice only change is necessary and not a minor permit revision.

Limited Potential to Emit (Entire Source)

The revised table below summarizes the total potential to emit, reflecting all limits, of the significant emission units (changes are bolded and stricken out for emphasis) :

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Formald ehyde *
Four (4) Combustion Turbines	249.0	249.0	15.48	9.01	249.0	249.0	8.75
natural gas heater	0.03	0.03	0.003	0.02	0.36	0.43	1.11E- 03
diesel engine	0.006	0.006	0.006	0.007	0.020	0.092	8.27E- 03
emergency generator	0.008	0.008	0.007	0.009	0.024	0.110	2.95E- 05
Total Emissions	249.04	249.04	15.49 15.50	9.04 9.05	249.38 249.40	249.52 249.63	8.76

County Attainment Status

The source is located in Knox County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Knox County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

There are no changes in Federal rule applicability from the original MSOP.

State Rule Applicability

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

Compliance Requirements

There are no changes to the Compliance Monitoring Requirements from the original MSOP.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations.

Conclusion

The source will be subject to the conditions of the attached proposed **MSOP Notice Only Change No. 083-11659-00041**.

**Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors
#1 and #2 Fuel Oil
One (1) diesel-fired emergency generator**

Company Name: West Fork Land Development Company, L.L.C
Address, City IN Zip: County Road South East 700 South, Wheatland, Indiana 47597
MSOP: 083-11654
Pit ID: 083-00041
Reviewer: NLJ
Date: 02/01/2000

Heat Input Capacity Potential Throughput S = Weight % Sulfur
MMBtu/hr kgals/year 0.5

0.5 31.2857143

Emission Factor in lb/MMBtu	Pollutant				
	PM	SO2	NOx	VOC	CO
	0.3	0.29 (1.01S)	4.4	0.36	1.0
Potential to Emit in tons/yr	0.7	0.6	9.7	0.8	2.1
Permitted Potential to Emit in tons/yr	0.008	0.007	0.110	0.009	0.024

Methodology

One gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Table 3.3-1 (SCC 2-02-001-02, 2-02-003-01) 10/96

PM Emission Factor is equivalent to the PM-10 emission factor listed in AP-42.

Potential Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 8760 hr/yr / 2,000 lb/ton

Permitted Emission (tons/yr) = Heat input (MMBtu/hr) x Emission Factor (lb/MMBtu) * 100 hr/yr / 2,000 lb/ton

HAPs

Emission Factor in lb/mmBtu	Benzene	Toluene	Xylene	Propylene	Formaldehyde
	9.3E-04	4.1E-04	2.9E-04	2.6E-04	1.2E-03
Potential to Emit in tons/yr	2.043E-03	8.957E-04	6.242E-04	5.650E-04	2.584E-03
Permitted Potential to Emit in tons/yr	2.33E-05	1.02E-05	7.13E-06	6.45E-06	2.95E-05

HAPs (continued)

Emission Factor in lb/mmBtu	Acetaldehyde	Acrolein	1,3 Butadiene	Total PAH
	7.7E-04	9.3E-05	3.9E-05	1.7E-04
Potential to Emit in tons/yr	1.680E-03	2.026E-04	8.563E-05	3.679E-04
Permitted Potential to Emit in tons/yr	1.92E-05	2.31E-06	9.78E-07	4.20E-06

Methodology

Emission Factors are from AP 42, Table 3.3-2, 10/96.

Potential to Emit (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu) * 8,760 hrs/yr / 2,000 lb/ton

Permitted Potential to Emit (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu) * 100 hrs/yr / 2,000 lb/ton