

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **092011-001** Project Number: 2011-04-050
Installation Number: 195-0046

Parent Company: Mid-Missouri Energy, LLC

Parent Company Address: 15311 N. Saline 65 Hwy, Malta Bend, MO 65339

Installation Name: Mid-Missouri Energy, LLC

Installation Address: 15311 N. Saline 65 Hwy, Malta Bend, MO 65339

Location Information: Saline County, S24, T51N, R23W

Application for Authority to Construct was made for:
Increase production of denatured ethanol to 60 million gallons per year. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

-
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

SEP 01 2011

EFFECTIVE DATE

Handwritten signature of Kyna L Moore in cursive script.

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments' Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Mid-Missouri Energy, LLC
Saline County, S24, T51N, R23W

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 102003-011) and its amendments (Table 1) issued by the Air Pollution Control Program.
2. **Emission Limitations**
 - A. Mid-Missouri Energy, LLC shall emit less than 100.0 tons of Volatile Organic Compounds (VOCs) from this installation in any consecutive twelve (12) month period.
 - 1) Mid-Missouri Energy, LLC shall record the monthly and the sum of the most recent consecutive twelve (12) months VOC emissions in tons from this installation. These records shall be kept on-site for five (5) years and shall be made immediately available for inspection to Department of Natural Resources' personnel upon request. Attachment A, Monthly VOC Emission Tracking Record, or an equivalent form shall be used for this purpose. The emission rates shall be verified through performance testing, as detailed in Special Conditions 13 and 14.
 - 2) Mid-Missouri Energy, LLC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176 Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records required by Special Condition Number 2(A)1 show that the emission limitation has been exceeded.
 - B. Mid-Missouri Energy, LLC shall emit less than 100.0 tons of Carbon Monoxide (CO) from this installation in any consecutive twelve (12) month period.
 - 1) Mid-Missouri Energy, LLC shall record the monthly and the sum of the most recent consecutive twelve (12) months CO emissions in tons from this installation. These records shall be kept on-site for five (5) years and shall be made immediately available for

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inspection to Department of Natural Resources' personnel upon request. Attachment B, Monthly CO Emission Tracking Record, or an equivalent form shall be used for this purpose. The emission rates shall be verified through performance testing, as detailed in Special Conditions 13 and 14.

- 2) Mid-Missouri Energy, LLC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176 Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records required by Special Condition Number 2(B)1 show that the emission limitation has been exceeded.

- C. Mid-Missouri Energy, LLC shall not discharge any Hazardous Air Pollutants (HAPs) into the atmosphere from the entire installation, or individual stack, in excess of the listed amounts in any consecutive twelve (12) month period:

HAP	Stack	Limit (tpy)
Acrolein	Entire installation	0.835
	(S40) Fermentation Scrubber	0.0438
	(S70) DDGS Cooling Cyclone	0.1226
	(S10) DDGS Dryer/Thermal Oxidizer	0.6570
Any remaining individual HAP	Entire installation	10.0
Combined HAP	Entire installation	25.0

- 1) Mid-Missouri Energy, LLC shall record the monthly and the sum of the most recent consecutive twelve (12) months HAP emissions in tons from this installation. These records shall be kept on-site for five (5) years and shall be made immediately available for inspection to Department of Natural Resources' personnel upon request. Attachment C, Monthly Individual HAP Emission Tracking Record, Attachment D, Monthly Combined HAP Emission Tracking Record or an equivalent form shall be used for this purpose. The emission rates shall be verified through performance testing, as detailed in Special Conditions 13 and 14.
- 2) Mid-Missouri Energy, LLC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City,

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Missouri 65102, no later than ten (10) days after the end of the month during which the records required by Special Condition Number 2(C)1 show that the emission limitation has been exceeded.

- D. Mid-Missouri Energy, LLC shall not discharge acrolein into the atmosphere from the following stacks in excess of the listed amounts:

Stack ID	Description	Lbs/hr
S40	Fermentation Scrubber	0.29
S70	DDGS Cooling Cyclone	0.16
S10	DDGS Dryer/Thermal Oxidizer	0.48

These emission rates shall be verified through performance testing, as detailed in Special Conditions 13 and 14.

- E. Mid-Missouri Energy, LLC shall not discharge particulate matter less than ten microns (PM₁₀) into the atmosphere from the following stacks in excess of the listed amounts:

Stack ID	Description	Lbs/hr
S40	Fermentation Scrubber	0.17
S15	Grain Unloading	1.67
S30	Hammermill	0.86
S70	DDGS Cooling Cyclone	1.11
S90	DDGS Loading	0.39
S10	DDGS Dryer/Thermal Oxidizer	6.81

These emission rates shall be verified through performance testing, as detailed in Special Conditions 13 and 14.

- F. Mid-Missouri Energy, LLC shall not discharge Nitrogen Oxides (NO_x) into the atmosphere from the following stacks in excess of the listed amounts:

Stack ID	Description	Lbs/hr
S10	DDGS Dryer/Thermal Oxidizer	19.0

These emission rates shall be verified through performance testing, as detailed in Special Conditions 13 and 14.

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The permittee is authorized to construct and operate subject to the following special conditions:

- G. Mid-Missouri Energy, LLC shall not discharge Sulfur Oxides (SO_x) into the atmosphere from the following stacks in excess of the listed amounts:

Stack ID	Description	Lbs/hr
S10	DDGS Dryer/Thermal Oxidizer	9.03

These emission rates shall be verified through performance testing, as detailed in Special Conditions 13 and 14.

3. Grain Receiving and Ethanol Production Limits

- A. Mid-Missouri Energy, LLC shall not exceed the following annual limit per 12-month rolling period.

Item (truck capacity)	Annual Limit
Grain, DDGS, Wetcake, Enzymes, Urea Acid, and Caustic Delivery/Shipment (25 tons)	31,800 trucks
Ethanol Shipment and Denaturant Delivery (7,800 gallons)	7,884 trucks
CO ₂ shipment (20 tons)	5,475 trucks

- B. Mid-Missouri Energy, LLC shall not exceed an annual production limit of 60,000,000 gallons of denatured ethanol per 12-month rolling period.
- C. Mid-Missouri Energy, LLC shall limit the annual amount of ethanol shipped by rail (F55) to 30 million gallons per year.
- D. Mid-Missouri Energy, LLC shall load ethanol to rail (F55) during the hours of 7 am to 7 pm, exclusively (i.e. daylight hours).
- E. To demonstrate compliance with Special Condition 3.A., 3.B. and 3.C, Mid-Missouri Energy, LLC shall keep a record of the monthly weight (tons) of grain received, gallons of denatured ethanol produced, and gallons ethanol shipped by rail. Attachment E, or equivalent form(s), shall be used for this purpose.

4. Haul Road Silt Loading Requirements

- A. The silt loading shall not exceed 1.0 grams/meter² on the haul roads at this installation.

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The permittee is authorized to construct and operate subject to the following special conditions:

- B. Mid-Missouri Energy, LLC shall develop, maintain, and implement a Fugitive Dust Control Plan (FDCP) that will control emissions from haul roads. The FDCP shall at a minimum include control and/or cleaning methods and establish a documentation procedure for the control and/or cleaning methods.
 - C. Compliance with the silt loading limitation shall be demonstrated by conducting a series (as defined in Appendix C of AP-42) of silt loading performance tests at least once per quarter during the first year after permit issuance. If the average silt loading is less than 75% of the limit in four consecutive tests, test frequency shall be reduced to once per calendar year.
 - D. The silt loading tests shall be representative (as defined in Appendix C of AP-42) and conducted in accordance with ASTM-C-136 method. Testing cannot be done immediately after cleaning. If there is a regular cleaning schedule, testing shall be done at the midpoint of the cleaning cycle (i.e. if cleaning is scheduled every week, then testing must be done at the midpoint of seven (7) days).
 - E. For each day truck traffic occurs, the owner or operator shall conduct a survey of the plant property and haul roads to determine if visible fugitive emissions are being generated and if these emissions are leaving the plant property. Documentation of all corrective actions and daily surveys shall be maintained in a log. Mid-Missouri Energy, LLC shall water haul roads whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary.
5. Control Equipment - Fermentation Wet Scrubbers
- A. The scrubber listed below must be in use at all times when the associated equipment is in operation and shall be operated and maintained in accordance with the manufacturer's specifications:

Control ID No.	Emission Point	Emission Unit controlled
C40	S40	Four fermentation tanks and beer well

- B. The scrubber shall be equipped with a gauge or meter that indicates the pressure drop across the scrubber. The scrubber shall be equipped with a flow meter that indicates the flow through the scrubber. This gauge and meter shall be located in such a way they may be easily observed by Department of Natural Resources' employees.

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The permittee is authorized to construct and operate subject to the following special conditions:

- C. Mid-Missouri Energy, LLC shall monitor and record the operating pressure drop across each scrubber at least once every twenty-four (24) hours while the equipment is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
 - D. Mid-Missouri Energy, LLC shall monitor and record the water flow rate through the scrubber at least once every twenty-four (24) hours while the equipment is in operation. The flow rate shall be maintained within the design conditions specified by the manufacturer's performance warranty.
 - E. Mid-Missouri Energy, LLC shall use sodium bisulfite or ammonium bisulfite (or other additive) in amounts sufficient to meet emission limits. The addition rate shall be maintained according to the rate specified by the most recent stack testing data.
 - F. Mid-Missouri Energy, LLC shall maintain an operating and maintenance log for the scrubber which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
 - 3) A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.
6. Control Equipment - Thermal Oxidizer
- A. The thermal oxidizer (C10) must be in use at all times when the DDGS Dryers (P10) or distillation operations (P50) are in operation or any time that regulated volatile organic compounds (VOC) or hazardous air pollutant (HAP) emissions are possible. The thermal oxidizer shall be operated and maintained in accordance with the manufacturer's specifications. Emission rates of VOC and HAPs will be tested, as detailed in Special Conditions 13 and 14, to verify the thermal oxidizer is operating as assumed.
 - B. The operating temperature of the thermal oxidizer shall be continuously monitored and recorded during operation. The operating temperature of the thermal oxidizer shall be maintained on a rolling 3-hour average at no more than 50 degrees Fahrenheit below the average temperature of the

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The permittee is authorized to construct and operate subject to the following special conditions:

oxidizer recorded during the compliance test specified in Special Conditions 13 and 14 which demonstrated compliance with the emission limits. The acceptable temperature range may be reestablished by performing a new set of emission tests. The thermal oxidizer shall be operated at all times during operation of the DDGS dryers or distillation equipment or any time that a regulated VOC or HAP emissions is possible. The most recent sixty (60) months of records shall be maintained on-site and shall be made immediately available to Missouri Department of Natural Resources' personnel upon request.

- C. Mid-Missouri Energy, LLC shall maintain an operating and maintenance log for the thermal oxidizer which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions;
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - 3) A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.

7. Control Equipment - Baghouses

- A. The baghouses listed below must be in use at all times when the associated equipment is in operation:

Control ID No.	Emission Point/ Stack ID	Emission Unit controlled
C15	S15	Grain Unloading
C30	S30	Hammermill
C90	S90	DDGS Loading
C70	S70	DDGS Cooler

- B. The baghouses and any related instrumentation or equipment shall be operated and maintained in accordance with the manufacturer's specifications. The baghouses shall be equipped with a gauge or meter that indicates the pressure drop across each baghouse. This gauge or meter shall be located in such a way it may be easily observed by Department of Natural Resources' employees.

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The permittee is authorized to construct and operate subject to the following special conditions:

- C. Replacement bags for all baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance and abrasion resistance).
 - D. The installation shall monitor and record the operating pressure drop across the baghouse at least once in every twenty four (24) hour period when the associated equipment is operated. The operating pressure drop shall be maintained within the normal operating range specified by the manufacturer's performance warranty. If the pressure drop reading should fall outside of this normal operating range, then the associated equipment shall be shut down as quickly as is reasonably practical. Corrective actions shall be taken to address the cause of the non-normal pressure drop and the baghouse(s) shall be returned to normal operation before re-starting the equipment.
 - E. The installation shall inspect the baghouse(s) at least once every six (6) months and at a minimum, conduct the following activities:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
8. Control Equipment – Flare
- A. The VRS flare (EP22) must be in use at all times during denatured ethanol truck loadout. The flare shall be operated and maintained in accordance with the manufacturer's specifications.
 - B. The Biomethanator flare (EP11) must be in use at all times when the DDGS Dryers (P10) are not in operation to control the biomethanator off-gases. During times when the DDGS Dryers (P10) are in operation, the biomethanator off-gases shall be vented to either the DDGS Dryers (P10) or the Biomethanator flare (EP11).
 - C. The flares shall be operated and maintained in accordance with the manufacturer's specifications.
 - D. Mid-Missouri Energy, LLC shall maintain an operating and maintenance log for the flares which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions;
 - 2) Maintenance activities, with inspection schedule, repair actions, and

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- replacements, etc.; and
 - 3) A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.
9. Cooling Tower Operating Requirements
- A. The cooling tower(s) shall be operated and maintained in accordance with the manufacturer's specifications. Manufacturer's specifications shall be kept on site and made readily available to Department of Natural Resources' employees.
 - B. The cooling water circulation rate shall not exceed 1,500,000 gallons per hour.
 - C. The drift loss from the towers shall not exceed 0.005 percent of the water circulation rate. Verification of drift loss shall be by manufacturer's guaranteed drift loss and shall be kept on site and made readily available to Department of Natural Resources' employees upon request.
 - D. The total dissolved solids (TDS) concentration in the circulated cooling water shall not exceed a TDS concentration of 2,500 parts per million (ppm) per sampling event. A TDS sample shall be collected at least once per calendar month.
10. Stack Height Requirements (from Permit Number 102003-011)
Stacks S15 (Grain Unloading) and S30 (Hammermill) shall have a minimum height of 21.34 meters (70.0 feet)
11. Annual Limitation on Natural Gas Usage
- A. Mid-Missouri Energy, LLC shall not exceed a usage rate of 1,660 million standard cubic feet of natural gas in any 12-month rolling period.
 - B. Mid-Missouri Energy, LLC shall track natural gas usage from the entire installation on a monthly and consecutive 12-month basis. Attachment F or equivalent forms shall be used to demonstrate compliance with Special Conditions 11.A.
 - C. Mid-Missouri Energy, LLC shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 11.B. indicate that the source

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

exceeds the limitation of Special Conditions Number 11.A

12. Restriction of Operational Hours

- A. Mid-Missouri Energy, LLC shall not operate the biomethanotor and VRS flares more than 4,380 hours, each, per 12-month rolling period.
- B. Mid-Missouri Energy, LLC shall not operate the emergency fire pump (S110) and emergency generator (S120) more than 300 hours, each, per 12-month rolling period.
- C. To demonstrate compliance with Special Condition 12.A. and 12.B., Mid-Missouri Energy, LLC shall keep a record of the monthly hours of operation. Attachment G, or equivalent form(s), shall be used for this purpose.

13. Performance Testing

- A. Mid-Missouri Energy, LLC shall conduct performance tests to verify the emission rates and/or the control efficiencies on the following units:
 - 1) The Fermentation CO₂ Scrubber (S40), DDGS Cooler Cyclone (S70), and Thermal Oxidizer and DDGS Dryers (S10) shall be tested to determine the VOC and HAP emission rates when all the processes controlled by these devices are in operation. These emission rates shall be used in Attachment C for compliance.
 - 2) The Thermal Oxidizer and DDGS Dryer (S10) shall be tested to determine the CO emission rate when burning natural gas.
 - 3) The stacks listed in Special Condition 2.D. shall be tested to determine the hourly acrolein emission rates. These emission rates shall not exceed the amounts listed in Special Condition 2.D.
 - 4) The stacks listed in Special Condition 2.E. shall be tested to determine the hourly PM₁₀ emission rates. These emission rates shall not exceed the amounts listed in Special Condition 2.E.
 - 5) The stack listed in Special Condition 2.F. shall be tested to determine the hourly NO_x emission rate when burning natural gas. This emission rate shall not be greater than 19.0 lb NO_x/hr.
 - 6) The stack listed in Special Condition 2.G. shall be tested to determine the hourly SO_x emission rate. This emission rate shall not be greater than 9.03 lb SO_x/hr.
- B. All applicable operating parameters (i.e. water flowrate, pH level, amount of additives, temperature, pressure, etc.) at which the stack tests are conducted shall be used to set the appropriate values used in actual

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

operations of the following control devices.

- 1.) The Wet Scrubber.
- 2.) The Thermal Oxidizer.

- C. The operating parameters in Special Condition 13.B. shall be determined and agreed upon by the Air Pollution Control Program's Enforcement Section and Mid-Missouri Energy, LLC before the start of the performance tests.
- D. The operating parameters in Special Condition 13.B. shall be recorded on record keeping sheet(s) and be made available to Department of Natural Resources personnel upon request. The frequency of the record keeping is dependent upon the parameters being kept and should be determined and agreed upon by the Air Pollution Control Program's Enforcement Section and Mid-Missouri Energy, LLC before the start of the performance tests.
- E. The performance tests for the fermentation scrubbers (S40) shall be conducted for one of the following time periods:
 - 1.) A complete cycle, defined as the time period between transferring the contents of one fermenter to the beer well and transferring the contents of the next fermenter; or
 - 2.) During period(s) of representative emissions. Mid-Missouri Energy, LLC shall submit, in the proposed test plant outlined in Special Condition 14, sufficient data to determine the point(s) of representative emissions. The representative emissions are the average of 3 points identified as highest airflow, lowest airflow, and mid-range airflow going up or down the pressure curve. Testing will consist of three (3) 1-hour runs at each of the 3 points. These points must be approved by the Air Pollution Control Program's compliance/assistance section prior to conducting the tests. If sufficient data is not supplied supporting these representative emission points, Mid-Missouri Energy, LLC must conduct testing for the time period outlined in Special Condition 13.E.1.
- F. The testing required in Special Condition 13.A(4) may be limited to conducting tests on a representative piece(s) of each type of equipment upon approval by the Director. In addition, an alternate method(s) of quantifying the emission rates of criteria air pollutants (e.g. PM₁₀) from these sources may be used in place of the above testing requirement if requested by Mid-Missouri Energy, LLC and approved by the Director.

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The permittee is authorized to construct and operate subject to the following special conditions:

- G. These tests shall be performed within sixty (60) days after achieving the maximum production rate of the installation, but not later than 180 days after initial start-up for commercial operation and shall be conducted in accordance with the stack test procedures outlined in Special Condition 14.
14. Proposed Test Plan
- A. A completed Proposed Test Plan Form (enclosed) must be submitted to the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing.
 - B. Two copies of a written report of the performance test results shall be submitted to the Director within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run.
 - C. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations.
 - D. If the performance testing required by Special Conditions 13 of this permit indicate that any of the emission rates or control efficiencies specified in Special Condition 2 are being exceeded, Mid-Missouri Energy, LLC must propose a plan to the Air Pollution Control Program within thirty (30) days of submitting the performance test results. This plan must demonstrate how Mid-Missouri Energy, LLC will reduce the emission rates or control efficiencies below those stated in Special Condition 2. Mid-Missouri Energy, LLC shall implement any such plan immediately upon its approval by the Director.
15. Record Keeping and Reporting Requirements
- A. Mid-Missouri Energy, LLC shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

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The permittee is authorized to construct and operate subject to the following special conditions:

- B. Mid-Missouri Energy, LLC shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2011-04-050
Installation ID Number: 195-0046
Permit Number:

Mid-Missouri Energy, LLC
15311 N. Saline 65 Hwy
Malta Bend, MO 65339

Complete: June 13, 2011

Parent Company:
Mid-Missouri Energy, LLC
15311 N. Saline 65 Hwy
Malta Bend, MO 65339

Saline County, S24, T51N, R23W

REVIEW SUMMARY

- Mid-Missouri Energy, LLC has applied for authority to increase production of ethanol to 60 million gallons per year.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are formaldehyde, acetaldehyde, methanol, and acrolein.
- 40 CFR 60 Subpart Kb, "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984" applies to the equipment. 40 CFR 60 Subpart VV, "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry" applies to the equipment. 40 CFR 60 Subpart VVa, "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006" applies to the equipment. 40 CFR 60 Subpart IIIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" applies to the equipment. 40 CFR 60 Subpart Db, "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units" applies to the equipment.
- The Maximum Achievable Control Technology (MACT) Subpart ZZZZ applies to the emergency equipment.
- A thermal oxidizer and scrubber are being used to control the VOC emissions from the equipment in this permit. Baghouses are being used to control PM₁₀ emissions from the grain handling equipment in this permit.
- This review was conducted in accordance with Section (6) of Missouri State Rule

10 CSR 10-6.060, Construction Permits Required. Potential emissions of VOC are above de minimis and the remaining pollutants are conditioned below de minimis levels.

- This installation is located in Saline County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed for VOC emissions since no screen model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions. In addition, ambient air quality modeling was not performed for remaining criteria air pollutants since their potential emissions are below de minimis levels. However, ambient air quality modeling was performed for acrolein since potential emissions of the application are above acrolein's screen modeling action level.
- Emissions testing are required for the equipment.
- An Intermediate Operating Permit is required for this installation within 90 days of equipment startup. Or a Part 70 Operating Permit application is required for this installation within 1 year of issuance of this construction permit.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Mid-Missouri Energy is an existing ethanol production plant located in Malta Bend, Missouri. Mid-Missouri Energy is a synthetic minor source for VOC, CO and HAPs. The following permits have been issued to Mid-Missouri Energy from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
102003-011	Section (6) permit for the construction of a 45 million gallon per year (MMgal/yr) ethanol plant
102003-011A	Revision to permit to include chemical suppressant as a haul road control
102003-011B	Revision of thermal oxidizer limit based on testing
OP2009-037	Intermediate operating permit

PROJECT DESCRIPTION

Mid-Missouri Energy is proposing to increase the production capacity of the facility from 45 million to 60 million gallons per year by adding a fourth fermentation tank and a fifth cooling tower cell. In order for this project to be reviewed under Section (5), the increase in emissions due to the increase in ethanol production must be less than de minimis levels for each pollutant affected by the project. These pollutants are PM₁₀, PM_{2.5}, NO_x, SO_x, VOC and CO. PM₁₀ emissions will increase due to the increased handling of grain being processed. VOC emissions will increase as ethanol production increases. The only sources of NO_x, SO_x and CO are the boilers and combustion emissions from the TO, the emergency equipment and the flares. With increased ethanol production, there will be increased drying of distillers grain solids in the TO which will require increased fuel combustion. Although HAPs emissions are also expected to increase with the project, HAPs were evaluated separately.

Table 2 lists the two (2) year average of actual emissions from data reported in Mid-Missouri Energy's 2009 and 2010 EIQ.

Table 2: Evaluation of actual emissions for PM₁₀, NO_x, SO_x, VOC and CO

EIQ Year	Emissions					
	PM ₁₀ (tpy)	PM _{2.5} (tpy)	NO _x (tpy)	SO _x (tpy)	VOC (tpy)	CO (tpy)
2009	42.77	10.01	42.82	0.41	31.68	63.11
2010	44.4	10.23	50.67	0.45	34.01	63.37
2- year Average	43.59	10.12	46.75	0.43	32.85	63.24
PTE	56.21	10.87	85.43	39.73	95.70	90.02
Increase in Emissions (PTE – actual average)	12.61	0.75	38.69	39.30	62.85	26.78
Above de minimis	No	No	No	No	Yes	No

The increase in emissions due to the project is less than de minimis for each pollutant except for VOC. Therefore, an installation-wide limit is not necessary. However, since the potential emissions for PM₁₀, PM_{2.5}, NO_x, and SO_x are based on proposed emission rates, testing will be required to ensure that the project emissions do not exceed de minimis for these pollutants. In particular, NO_x, PM₁₀ and PM_{2.5} emissions from the thermal oxidizer and PM₁₀ and PM_{2.5} emissions from the scrubber are expected to increase from the increase in production. Also, SO_x from the thermal oxidizer is expected to increase due to the use of sulfuric acid in the process which is then emitted.

At the time of permit issuance, ethanol plants are no longer considered named installations (with a major source level of 100 tpy). Since the potential emissions of the installation for VOC and CO are less than minor source levels, 100 tpy limits are no longer necessary for the installation to remain a minor source. However, due to past transgressions of ethanol plants, it is important to ensure that VOC and CO emissions are not exceeding major thresholds. Mid-Missouri Energy has requested the 100 tpy limits be extended from their old construction permit into the current construction permit. Testing of the emission rates will be required.

In addition, Mid-Missouri Energy has requested a natural gas limitation such that the carbon dioxide equivalent (CO₂e) emissions are less than the major source level for greenhouse gases (GHGs) of 100,000 tons of CO₂e per year for non-biogenic sources. Special Condition 11 is intended to set this limit. Greenhouse gas emissions from the combustion of diesel in the emergency equipment have been limited based on the restriction on hours of operations in Special Condition 12.

It should be noted that the Environmental Protection Agency released the *Deferral for CO₂ Emissions from Bioenergy and Other Biogenic Sources under the Prevention of Significant Deterioration (PSD) and Title V Programs* on July 1, 2011. Therefore, the potential emissions of the equipment covered by this construction permit do not include CO₂ emissions from biogenic sources such as the fermentation process and DDGS process per the deferral.

EMISSIONS/CONTROLS EVALUATION

The pollutants of concern for the purpose of this review are PM₁₀, PM_{2.5} VOCs, HAPs and NO_x.

Grain Handling and Storage

PM₁₀ will be emitted from the grain receiving, handling, storage, and milling processes. During these processes, PM₁₀ and PM_{2.5} emissions will be controlled by baghouses, and the applicant has proposed to use a grain loadout of 0.005 gr/dscf to estimate emissions from processes totally enclosed and vented to a baghouse. For those processes where fugitive emissions are expected, a 95% capture efficiency is given to the aspiration system venting to the baghouse. A 100% capture efficiency cannot be given because grain receiving occurs in a building with overhead doors that will be opening and closing on a consistent basis. The emission factors for estimating PM₁₀ and PM_{2.5} emissions from grain handling, storage and drying processes were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1 *Grain Elevators and Processes* (4/03).

Fermentation and Distillation

VOCs and HAPs will be emitted from the fermentation and distillation processes. Condensable PM₁₀ and PM_{2.5} may also be emitted. The fermentation processes and the distillation processes are controlled by wet scrubbers. Potential emissions of VOC and HAPs were estimated by the applicant. Mid-Missouri Energy shall perform stack tests to ensure that the estimated emission rates are not exceeded.

Fugitive VOC emissions will occur from plant piping, such as valves and pumps in light and heavy service, gas valves, compressor seals, pressure relief valves, sampling connections, and connectors. Mid-Missouri Energy will perform Leak Detection and Repair (LDAR) in accordance with NSPS, Subpart VV (40 CFR 60.480 through 60.489). Fugitive emissions from the components within the plant piping system were estimated based on EPA's Synthetic Organic Chemical Manufacturing Industry (SOCMI) emission factors in EPA document 453/R-95-017, *Protocol for Equipment Leak and Emission Estimates*.

DDGS Drying and Storage

The WDGS will be stored in an open storage area, from which it can be loaded onto trucks for delivery to customers or be sent to the dryers to be dried into DDGS. The WDGS storage and handling is expected to have negligible PM₁₀ emissions due to its high moisture content. However, VOC and HAPs will be emitted from the WDGS. The production of DDGS is expected to have higher emissions than the production of WDGS because certain equipment, such as the DDGS dryer, will not be in operation for the production of WDGS. As such, for permitting purposes, potential emissions are based on all WDGS being converted to DDGS.

Distillers Grain is dried using drum dryers. VOCs, HAPs, PM_{2.5}, and PM₁₀ are emitted from DDGS drying. VOC and HAP emissions from the DDGS dryers are controlled using the thermal oxidizer.

PM₁₀, PM_{2.5} VOCs, NO_x, sulfur oxides (SO_x) and carbon monoxide (CO) are emitted from the combustion of natural gas. Criteria air pollutant emission factors for the combustion of natural gas were obtained from AP-42, Section 1.4, *Natural Gas Combustion (7/98)*. However, AP-42 emission factors are not appropriate for the thermal oxidizer and the dryers which use off-gases from the ethanol production process as fuel in addition to natural gas. The applicant has provided emission factors for the thermal oxidizer and the dryers. Therefore, testing is required to demonstrate compliance with emission limits of this permit.

Storage Tanks and Ethanol Loadout

VOCs will be emitted from the storage tanks and truck/rail loadout. Storage Tank Emissions were calculated using TANKS 4.0. Emissions from ethanol truck loadout are controlled by a smokeless, open flare. Loadout Emissions were determined using AP-42, Section 5.2, *Transportation and Marketing of Petroleum Liquids* and giving a capture and control device efficiency for the flare supplied by the vendor. Since performance tests are difficult for open flares, none are required for the flare to show emissions compliance. However, Mid-Missouri Energy shall operate the flare in accordance with 40 CFR 60.18 *General Control Device Requirements* and maintain records sufficient to show compliance with 40 CFR 60.18. Emission factors for the vapor recovery system flare and the biomethanator flare were obtained from AP-42, Section 13.5 *Industrial Flares (9/91)*.

The denatured ethanol can be shipped by truck or rail. When shipping by truck, non-dedicated tanker trucks will be used. Therefore, loading loss emissions were calculated using gasoline as the displaced vapor. All rail cars are assumed to be operating under dedicated normal service.

Cooling Tower

Cooling tower emissions were determined using AP-42, Section 13.4, *Wet Cooling Towers*. Cooling tower emissions were calculated assuming that the total dissolved solid content in the cooling tower is 2,500 parts per million and the drift loss is 0.005 percent.

Haul Roads

Haul road emissions were obtained from Section 13.2.1, *Paved Roads (1/11)*. The silt loading for the paved road was assumed to be 1.0 g/m². To ensure that the silt loading is not higher than proposed, a special condition has been added to this construction permit restricting the silt loading content of the haul roads. Table 3 outlines the operational parameters used in the calculation of the haul road emissions.

Table 3: Truck parameters used in haul road calculations

Item (truck capacity)	Annual Amount Hauled
Grain (25 tons)	600,000 tons
DDGS, Wetcake, Syrup Shipment, Enzymes, Urea Acid, and Caustic Delivery (25 tons)	195,000 tons
Denaturant Deliver (7800 gallons)	1,500,000 gallons
CO ₂ shipment (20 tons)	109,500 tons

Emergency Firewater Pump and Generator

A diesel-powered emergency firewater pump and emergency generator is permitted for the plant. Potential emissions of criteria pollutants from the pump were estimated using emission factors from AP-42, Section 3.3, *Gasoline and diesel Industrial Engines* and based on 300 hours of operation per year. NSPS subpart IIII does not apply to the fire pump since it was installed prior to July 1, 2006. However, MACT subpart ZZZZ does apply to the generator.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 4: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2010 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM _{2.5}	10.0	N/D	10.23	10.87	N/A
PM ₁₀	15.0	58.21	44.40	56.21	N/A
SO _x	40.0	0.65	0.45	39.73	<40*
NO _x	40.0	95.87	50.67	85.43	N/A
VOC	40.0	<100	34.01	95.7	N/A
CO	100.0	<100	63.37	90.02	N/A
GHG	100,000**	N/D	N/D	<100,000***	N/A
Acetaldehyde	10.0	<10	N/D	9.41	<10
Total HAPs	25.0	<25	N/D	24.16	<25

N/A = Not Applicable; N/D = Not Determined

*The hourly limit in Special Condition 2 for SO_x equates to less than 40 tpy.

**Major source level based on CO₂ equivalences.

***This does not include biogenic sources.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. The increase in potential emissions for VOC is above de minimis levels, and the increase in potential emissions of all remaining pollutants is below de minimis levels.

APPLICABLE REQUIREMENTS

Mid-Missouri Energy, LLC shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *New Source Performance Regulations*, 10 CSR 10-6.070 – *New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc
- *New Source Performance Regulations*, 10 CSR 10-6.070 – *New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*, 40 CFR Part 60, Subpart VV

- *New Source Performance Regulations, 10 CSR 10-6.070 – New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced After July 23, 1984, 40 CFR Part 60, Subpart Kb*
- *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.060*

AMBIENT AIR QUALITY IMPACT ANALYSIS

There are three HAPs of concern from the increase in ethanol production: acetaldehyde, acrolein, and formaldehyde. Ambient air quality modeling was only performed on the HAPs with an increase in emissions greater than their respective Screen Modeling Action Level (SMAL). Table 5 outlines the emissions evaluation.

Table 5: HAPs modeling requirement

Pollutant	PTE (tpy)	Actual (tpy)	Difference (tpy)	SMAL (tpy)	Modeling required
Acetaldehyde	9.4	0.86	8.54	9	No
Acrolein	4.1	0.39	3.71	0.04	Yes
Formaldehyde	1.8	N/D	1.8	2	No

N/D Not Determined

Since the increase in acrolein triggers the need for modeling, the potential emissions of the entire installation must be used in determining compliance with the Risk Assessment Level (RAL) for acrolein. A refined modeling analysis was performed to determine the impact of acrolein emissions at or beyond the property boundary of the facility. The results are summarized in Table 6. For complete modeling information refer to the August 22, 2011 memorandum from Joshua VanderVeen entitled, "Ambient Air Quality Impact Analysis (AAQIA) for Mid-Missouri Energy, LLC."

Table 6: Screen Modeling Results for Acrolein

Pollutant	Modeled Impact ($\mu\text{g}/\text{m}^3$)	RAL ($\mu\text{g}/\text{m}^3$)	Time Period
Acrolein	2.7	6.9	24-hour
	0.0198	0.02	Annual

Based upon the model reviewed by the Air Pollution Control Program staff, the refined modeling submitted by Mid-Missouri Energy demonstrates that the RAL for acrolein will not be exceeded. Special conditions have been added to this construction permit limiting acrolein annual and hourly emission rates to ensure the modeled emission rates will not be exceeded. The ethanol rail loadout annual limit is also being added as a special condition based on the modeling results. The hourly emission rate limit must be met in order remain in compliance with the 24-hour RAL. If Mid-Missouri Energy intends to use a lower hourly emission rate to demonstrate compliance with the annual limit, testing must be performed according to the testing conditions of this permit.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Emily Wilbur
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated April 19, 2011, received April 21, 2011, designating Mid-Missouri Energy, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Northeast Regional Office Site Survey, dated May 4, 2011.

A 12-Month VOC emissions total (e) of less than 100.0 tons indicates compliance.

Attachment B: Monthly CO Emission Tracking Record

Mid-Missouri Energy, LLC
 Saline County, S24, T51N, R23W
 Project Number: 2011-04-050
 Installation ID Number: 195-0046
 Permit Number:

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

Copy this sheet as needed

Column A	Column B	Column C	Column D	Column E
Emission Point(s)	Description	Amount Processed	CO Emission Factor	(a) CO Emissions (tons)

(b) Total CO Emissions Calculated for this Month in Tons:	
(c) 12-Month CO Emissions Total From Previous Month's Worksheet B, in Tons:	
(d) Monthly CO Emissions Total (b) from Previously year's Worksheet B, In Tons:	
(e) Current 12-month Total of CO Emissions in Tons : [(b) + (c) - (d)]	

- (a) [Column E] = [Column C] x [Column D] x 0.0005. Emission factor obtained from performance tests required by this permit.
- (b) Summation of [Column E] in Tons;
- (c) 12-Month CO emissions total (e) from last month's Worksheet B, in Tons;
- (d) Monthly CO emissions total (b) from previous year's Worksheet B, in Tons;
- (f) Calculate the new 12-month CO emissions total.

A 12-Month CO emissions total (e) of less than 100.0 tons indicates compliance.

Attachment C: Monthly Individual HAP Emission Tracking Record

Mid-Missouri Energy, LLC
 Saline County, S24, T51N, R23W
 Project Number: 2011-04-050
 Installation ID Number: 195-0046
 Permit Number:

HAP Name: _____ CAS No.: _____

This sheet covers the period from _____ to _____.
(month, year) (month, year)

Copy this sheet as needed

Column A	Column B	Column C	Column D	Column E
Emission Point(s)	Description	Amount Processed	Individual HAP Emission Factor	(a) Individual HAP Emissions (tons)

(b) Total Individual HAP Emissions Calculated for this Month in Tons:	
(c) 12-Month Individual HAP Emissions Total From Previous Month's Worksheet C, in Tons:	
(d) Monthly Individual HAP Emissions Total (b) from Previously year's Worksheet C, In Tons:	
(e) Current 12-month Total of Individual HAP Emissions in Tons : [(b) + (c) - (d)]	

- (a) [Column E] = [Column C] x [Column D] x 0.0005. Emission factor obtained from performance tests required by this permit.
- (b) Summation of [Column E] in Tons;
- (c) 12-Month Individual HAP emissions total (e) from last month's Worksheet C, in Tons;
- (d) Monthly Individual HAP emissions total (b) from previous year's Worksheet C, in Tons;
- (g) Calculate the new 12-month Individual HAP emissions total.

**A 12-Month Individual HAP emissions total (e) of less than 10.0 tons indicates compliance.
 For acrolein, a 12-Month emissions total (e) of less than 0.835 tons indicates compliance.**

Attachment D: Monthly Combined HAP Emission Tracking Record

Mid-Missouri Energy, LLC
 Saline County, S24, T51N, R23W
 Project Number: 2011-04-050
 Installation ID Number: 195-0046
 Permit Number:

This sheet covers the period from _____ to _____.
(month, year) (month, year)

Copy this sheet as needed

Column A	Column B	Column C	Column D	Column E
Emission Point(s)	Description	Amount Processed	HAP Emission Factor	(a) HAP Emissions (tons)

(b) Total HAP Emissions Calculated for this Month in Tons:	
(c) 12-Month HAP Emissions Total From Previous Month's Worksheet D, in Tons:	
(d) Monthly HAP Emissions Total (b) from Previously year's Worksheet D, In Tons:	
(e) Current 12-month Total of HAP Emissions in Tons : [(b) + (c) - (d)]	

- (a) [Column E] = [Column C] x [Column D] x 0.0005. Emission factor obtained from performance tests required by this permit.
- (b) Summation of [Column E] in Tons;
- (c) 12-Month HAP emissions total (e) from last month's Worksheet D, in Tons;
- (d) Monthly HAP emissions total (b) from previous year's Worksheet D, in Tons;
- (h) Calculate the new 12-month HAP emissions total.

A 12-Month HAP emissions total (e) of less than 25.0 tons indicates compliance.

Mr. Tyler Edmundson
Plant Manager
Mid-Missouri Energy, LLC
15311 N. Saline 65 Hwy
Malta Bend, MO 65339

RE: New Source Review Permit - Project Number: 2011-04-050

Dear Mr. Edmundson:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Emily Wilbur, at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:ewl

Enclosures

c: Northeast Regional Office
PAMS File: 2011-04-050

Permit Number: