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: 012008-002 Project Number: 2007-07-073

Parent Company: Ozark Ethanol, LLC

Parent Company Address: P.O. Box 43, Liberal, MO 64762

Installation Name: Ozark Ethanol, LLC

Installation Address: Southeast of US Hwy 54 and MO Hwy 43 Intersection

Location Information: Vernon County, S11, T35N, R32W

Application for Authority to Construct was made for a new ethanol production facility with the capacity to produce 65 million gallons of undenatured ethanol annually. 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.

EFFECTIVE DATE

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 devises shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the department’s Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located with 15 days after the actual start up of this (these) air contaminant source(s).

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.
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."

Ozark Ethanol, LLC
Vernon County, S11, T35N, R32W

1. Emission Limitation
   A. Ozark Ethanol, LLC shall emit less than 100 tons of Volatile Organic Compounds (VOCs) from this installation in any consecutive 12-month period.
      1) Ozark Ethanol, 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 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 Condition 7.
      
      2) Ozark Ethanol, LLC shall report to the Air Pollution Control Program 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 1.A(1) show that the emission limitation has been exceeded.

   B. Ozark Ethanol, LLC shall emit less than 100 tons of Carbon Monoxide (CO) from this installation in any consecutive 12-month period.
      1) Ozark Ethanol, 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 available for 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 Condition 7.
      
      2) Ozark Ethanol, LLC shall report to the Air Pollution Control Program 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 1.B(1) show that the
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

emission limitation has been exceeded.

C. Ozark Ethanol, LLC shall emit less than ten (10.0) tons of any individual Hazardous Air Pollutants (HAPs), twenty-five (25.0) tons of combined HAPs, and nine (9.0) tons of acetaldehyde from this installation in any consecutive twelve (12) month period.

1) Ozark Ethanol, 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 available for inspection to Department of Natural Resources personnel upon request. Attachment C, Monthly Individual HAPs Tracking Record and Attachment D, Monthly Combined HAP Emission Tracking Record or equivalent forms shall be used for this purpose. The emission rates shall be verified through performance testing, as detailed in Special Condition 7.

2) Ozark Ethanol, LLC shall report to the 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 1.C(1) show that the emission limitation has been exceeded.

D. Ozark Ethanol, LLC shall not discharge nitrogen oxides (NOₓ) into the atmosphere from the following stacks in excess of the listed amounts:

<table>
<thead>
<tr>
<th>Control ID</th>
<th>Emission Point</th>
<th>Description</th>
<th>Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE12</td>
<td>EP12</td>
<td>RTO Stack</td>
<td>6.34 Lbs/hr</td>
</tr>
<tr>
<td>CE17</td>
<td>EP17</td>
<td>Flare</td>
<td>0.0334 Lbs/gal</td>
</tr>
<tr>
<td>CE13</td>
<td>EP13</td>
<td>Boiler #1</td>
<td>3.69 Lbs/hr</td>
</tr>
<tr>
<td>CE14</td>
<td>EP14</td>
<td>Boiler #2</td>
<td>3.69 Lbs/hr</td>
</tr>
</tbody>
</table>

These emission rates shall be verified through performance testing, as detailed in Special Condition 7.

E. Ozark Ethanol, LLC shall not discharge sulfur oxides (SOₓ) into the atmosphere from the following stacks in excess of the listed amounts:
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

<table>
<thead>
<tr>
<th>Control ID</th>
<th>Emission Point</th>
<th>Description</th>
<th>Lbs/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE12</td>
<td>EP12</td>
<td>RTO Stack</td>
<td>3.57</td>
</tr>
<tr>
<td>CE17</td>
<td>EP17</td>
<td>Flare</td>
<td>0.10</td>
</tr>
</tbody>
</table>

These emission rates shall be verified through performance testing, as detailed in Special Condition 7.

F. Ozark Ethanol LLC shall not discharge PM$_{10}$ into the atmosphere from the following stacks in excess of the listed amounts:

<table>
<thead>
<tr>
<th>Control ID</th>
<th>Emission Point</th>
<th>Description</th>
<th>Lbs/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE01</td>
<td>EP01</td>
<td>Grain Receiving Baghouse #1</td>
<td>0.772</td>
</tr>
<tr>
<td>CE02</td>
<td>EP02</td>
<td>Grain Receiving Baghouse #2</td>
<td>0.772</td>
</tr>
<tr>
<td>CE03</td>
<td>EP03</td>
<td>Corn Storage Bin #1 Bin Vent Filter</td>
<td>0.087</td>
</tr>
<tr>
<td>CE04</td>
<td>EP04</td>
<td>Corn Storage Bin #2 Bin Vent Filter</td>
<td>0.087</td>
</tr>
<tr>
<td>CE05</td>
<td>EP05</td>
<td>Surge Bin Vent Filter</td>
<td>0.034</td>
</tr>
<tr>
<td>CE06</td>
<td>EP06</td>
<td>Hammermill Baghouse #1</td>
<td>0.155</td>
</tr>
<tr>
<td>CE07</td>
<td>EP07</td>
<td>Hammermill Baghouse #2</td>
<td>0.155</td>
</tr>
<tr>
<td>CE08</td>
<td>EP08</td>
<td>DDGS Reclaim Baghouse</td>
<td>0.064</td>
</tr>
<tr>
<td>CE09</td>
<td>EP09</td>
<td>DDGS Loadout Baghouse #1 (truck)</td>
<td>0.053</td>
</tr>
<tr>
<td>CE10</td>
<td>EP10</td>
<td>DDGS Loadout Baghouse #2 (rail)</td>
<td>0.078</td>
</tr>
<tr>
<td>CE11</td>
<td>EP11</td>
<td>Fermentation (CO$_2$) Scrubber</td>
<td>0.100</td>
</tr>
<tr>
<td>CE12</td>
<td>EP12</td>
<td>RTO Stack</td>
<td>3.069</td>
</tr>
<tr>
<td>CE13</td>
<td>EP13</td>
<td>Boiler #1</td>
<td>0.690</td>
</tr>
<tr>
<td>CE14</td>
<td>EP14</td>
<td>Boiler #2</td>
<td>0.690</td>
</tr>
</tbody>
</table>

These emission rates shall be verified through performance testing, as detailed in Special Condition 7.

2. Control Equipment - Baghouses
   A. The baghouses listed below must be in use at all times when the associated equipment is in operation:
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

<table>
<thead>
<tr>
<th>Control ID No.</th>
<th>Emission Point</th>
<th>Emission Unit Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE01</td>
<td>EP01</td>
<td>Grain Receiving</td>
</tr>
<tr>
<td>CE02</td>
<td>EP02</td>
<td>Grain Receiving</td>
</tr>
<tr>
<td>CE06</td>
<td>EP06</td>
<td>Hammermill #1</td>
</tr>
<tr>
<td>CE07</td>
<td>EP07</td>
<td>Hammermill #2</td>
</tr>
<tr>
<td>CE08</td>
<td>EP08</td>
<td>DDGS Reclaim</td>
</tr>
<tr>
<td>CE09</td>
<td>EP09</td>
<td>DDGS Loadout #1 (Truck)</td>
</tr>
<tr>
<td>CE10</td>
<td>EP10</td>
<td>DDGS Loadout #2 (Rail)</td>
</tr>
</tbody>
</table>

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.

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. Visible emissions will be used as an indicator of the proper operation of the control device. During proper operation no visible emissions are expected from this emission unit. The existence of visible emissions will indicate a decrease in the efficiency of the control device and corrective actions will be implemented
   1) Visible emissions from the exhaust shall be monitored on a daily basis when the process is in operation.
   2) The duration of the observation shall be for a 2 minute time period.
   3) The condition of no visible emissions is considered normal for this emission unit. When visible emissions are noted from the emission unit, it shall be documented and corrective actions taken.

E. The observation of visible emissions from this emission unit will be considered an excursion and corrective actions shall be implemented within a reasonable period. An excursion does not necessarily indicate a violation of the applicable requirement. When the level of excursions exceed three percent of the of the total number of observations in a six month period and corrective actions fail to return the emission unit to a no visible emission condition, then the permittee shall conduct source testing.
SPECIAL CONDITIONS:

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

within 90 days of the last excursion to demonstrate compliance with 10 CSR 10-6.400. If the test demonstrates noncompliance with the above emission limitation the permittee shall propose a schedule to implement further corrective actions to bring the source into compliance and demonstrate that compliance.

F. Ozark Ethanol, LLC shall monitor and record the operating pressure drop across the baghouses 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 baghouses shall be returned to normal operation before re-starting the equipment.

G. Ozark Ethanol, LLC shall inspect the baghouses 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.

3. Control Equipment – Fermentation Wet Scrubber

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

<table>
<thead>
<tr>
<th>Control ID No.</th>
<th>Emission Point</th>
<th>Emission Unit controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE11</td>
<td>EP11</td>
<td>Yeast Tank, Fermenters #1-#4, Beerwell</td>
</tr>
</tbody>
</table>

B. The scrubber and any related instrumentation or equipment shall be operated and maintained in accordance with the manufacturer’s specifications. 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.

C. Ozark Ethanol, LLC shall monitor and record the operating pressure drop across the scrubber at least once every twenty-four (24) hours. The
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

D. Ozark Ethanol, LLC shall monitor and record the flow rate through the scrubber at least once every twenty-four (24) hours. The flow rate shall be maintained within the design conditions specified by the manufacturer's performance warranty.

E. Ozark Ethanol, 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.

4. Control Equipment - Multicyclone
A. The multicyclone must be in use at all times when the DDGS Dryer (EU40) is in operation. The multicyclone shall be operated and maintained in accordance with the manufacturer's specifications.

B. The multicyclone shall be equipped with a gauge or meter that indicates the pressure drop across the multicyclone. Ozark Ethanol, LLC shall monitor and record the operating pressure drop across the multicyclone at least once every twenty-four (24) hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

C. Ozark Ethanol, LLC shall maintain an operating and maintenance log for the multicyclone 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.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

5. Control Equipment – Regenerative Thermal Oxidizer (CE12)

A. The regenerative thermal oxidizer (RTO) must be in use at all times when the associated equipment is in operation:

<table>
<thead>
<tr>
<th>Control ID No.</th>
<th>Emission Point</th>
<th>Emission Unit Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE12</td>
<td>EP12</td>
<td>Slurry Tank, Liquefaction Tank, Beer Column, Stripper, Rectifier, Evaporator System, Whole Stillage Tank, Thin Stillage Tank, Syrup Tank, Centrifuges #1 and #2, Molecular Sieves #1 and #2, 200 Proof Condenser</td>
</tr>
</tbody>
</table>

B. The RTO must be in use at all times when the regulated VOC, CO, or HAP emissions are possible. The RTO shall be operated and maintained in accordance with the manufacturer’s specifications. Emission rates of VOCs, HAPs and CO will be tested, as detailed in Special Condition 7, to verify the RTO is operating as assumed.

C. The operating temperature of the RTO shall be continuously monitored and recorded during operation. The operating temperature of the thermal oxidizer shall be maintained on a rolling 3-hour average within 50 degrees Fahrenheit of the average temperature of the oxidizer recorded during the compliance test specified in Special Condition 7 which demonstrated compliance with the emission limits. The acceptable temperature range may be reestablished by performing a new set of emission tests. 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.

D. Ozark Ethanol, LLC shall maintain an operating and maintenance log for the RTO 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.
SPECIAL CONDITIONS:

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

6. Control Measure – 98.0% Capture Efficiency
   A. The grain and DDGS storage and handling equipment shall be enclosed by ductwork and the grain milling equipment shall be located in a building. The enclosures/buildings shall be maintained under negative pressure and exhausted to baghouses.
   B. Ozark Ethanol, LLC shall demonstrate negative pressure by using visual indicators, such as negative pressure gauges, at each openings of the enclosure.
   C. Ozark Ethanol, LLC shall perform a visual indicator check for each emission point at least once in every 24-hour period while the grain milling equipment and grain and DDGS handling and storage equipment are in operation.

7. Performance Testing
   A. Ozark Ethanol, LLC shall conduct performance tests to verify the following emission rates in pounds of pollutant per hour, except for NOx from the flare (EP17), which shall be in pounds of NOx per gallon of fuel used:
      1) The fermentation scrubber (CE11), and the RTO (CE12) shall be tested to determine the VOC and aggregate HAP emission rates when all the processes controlled by these devices are in operation. These emission rates shall be used in Attachments A and D for compliance with Special Condition 1.A. and 1.C.
      2) The fermentation scrubber (CE11), and the RTO (CE12) shall be tested to determine the emission rates of the following HAP: acetaldehyde. This emission rate shall be used in Attachment C for compliance with Special Condition 1.C.
      3) The RTO (CE12), Boiler #1 (EP13) and Boiler #2 (EP14) shall be tested to determine the CO emission rate when in operation. These emission rates shall be used in Attachment B for compliance with Special Condition 1.B.
      4) The RTO (CE12), Boiler #1 (EP13), Boiler #2 (EP14), and Flare (EP17) shall be tested to determine the NOx emission rates when in operation. These emission rates shall not exceed the amounts listed in Special Condition 1.D.
      5) The RTO (CE12), Boiler #1 (EP13), and Boiler #2 (EP14) shall be tested to determine the SOx emission rate when in operation. These emission rates shall not exceed the amounts listed in Special Condition 1.E.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

6) The emission points listed in Special Condition 1.G. shall be tested to determine the PM$_{10}$ emission rates when in operation. These emission rates shall not exceed the amounts listed in Special Condition 1.F.

B. The performance tests for the fermentation wet scrubber (CE11) shall be conducted for one of the following time periods:

1.) A complete cycle, defined as the time period between load-in and load-out of material. For the fermentation process, where many fermenters are used, the time period to be tested is the complete cycle for one fermenter.

Or

2.) During period(s) of maximum emissions. Ozark Ethanol, LLC shall submit, in the proposed test plant outlined in Special Condition 8, sufficient data to determine the point(s) of maximum emissions. These points must be approved by the Air Pollution Control Program’s compliance/assistance section prior to conducting the tests. If sufficient data are not supplied supporting these maximum emission points, Ozark Ethanol, LLC must conduct testing for the time period outlined in Special Condition 7.B.1.

C. The testing required in Special Condition 7.A(3) through 7.A(6) 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 from these sources may be used in place of the above testing requirement if requested by Ozark Ethanol, LLC and approved by the Director.

D. 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 8.

E. Ozark Ethanol, LLC shall conduct performance tests to verify the emission rates as indicated in Special Condition 7.A once every five years from the date of the most recent performance tests, except for the fermentation scrubber stack, which shall be tested once every year. If there is no variability in the stack tests, Ozark Ethanol, LLC may request changing the required testing frequency to once every five years. If there is variability, then
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Ozark Ethanol, LLC, may work with the Air Pollution Control Program to address the issue.

F. The 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 operations of the following control devices.
   1.) The Fermentation Scrubber.
   2.) The RTO.

G. The operating parameters in Special Condition 7.F. shall be determined and agreed upon by the Air Pollution Control Program’s Enforcement Section and Ozark Ethanol, LLC before the start of the performance tests.

H. The operating parameters in Special Condition 7.F. 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 Ozark Ethanol, LLC before the start of the performance tests.

   A. A completed Proposed Test Plan Form 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 (2) 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 (1) 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 Condition 7 of this permit indicates that any of the emission limits specified in Special Condition 1 are being exceeded, Ozark Ethanol, LLC must propose a plan to the Air Pollution
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Control Program within thirty (30) days of submitting the performance test results. This plan must demonstrate how Ozark Ethanol, LLC will reduce the emission rates below those stated in Special Condition 1. Ozark Ethanol, LLC shall implement any such plan immediately upon its approval by the Director.

9. Operating Permit Requirements
   Ozark Ethanol, LLC shall apply for and receive an Intermediate Operating Permit from the Air Pollution Control Program for this installation.

10. Requirements for Future Emission Alterations
    If the emissions from this installation, as permitted, ever increase above 100 tons per year for VOC or CO when the production capacity is at or below 65,000,000 gallons undenatured ethanol per year, then Ozark Ethanol, LLC will be required to conduct a New Source Review in accordance with 10 CSR 10-6.060(8).

11. Emergency Equipment Requirements
    A. The total operating hours of the emergency generator shall not exceed 250 hours in any consecutive 12-month period. To facilitate the record keeping for this condition, the emergency generator shall be equipped with a non-resetable running time meter.
    
    B. The total operating hours of the emergency fire pump shall not exceed 250 hours in any consecutive 12-month period. To facilitate the record keeping for this condition, the fire pump shall be equipped with a non-resetable running time meter.
    
    C. Attachment E or an equivalent form shall be used to record the hours of operation. Ozark Ethanol, LLC shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources personnel upon request. These records shall include the operating hours for that month and the total hours of operation for the previous 12-month period.
    
    D. Ozark Ethanol, 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 from Special Condition 11.C indicate that the source exceeds the Special Condition 11.A or 11.B.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

12. Pavement of Haul Roads
   A. Ozark Ethanol, LLC shall pave the specified haul roads (FS06) with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the Program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve “Control of Fugitive Emissions” while the plant is operating.
   B. Maintenance and/or repair of the surfaces will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
   C. Ozark Ethanol, LLC shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

13. Grain Receiving and DDGS Loadout
   A. Only hopper trucks shall be used for receiving grain by truck.
   B. The tons received per day during the harvest season, as defined as the months of June through November, and during the non-harvest season, as defined as the months of December through May, shall be limited to the following amounts: Harvest Season – Grain Receiving, 6,875 tons per day; DDGS Loadout, 625 tons per day and Non-Harvest Season – Grain Receiving, 3,125 tons per day; DDGS Loadout, 625 tons per day.
   C. Ozark Ethanol, LLC shall keep records to ensure the limits of this Special Condition and use Attachment F or other equivalent forms for this purpose.

14. Haul Road Traffic
   A. Haul road traffic shall only be permitted from 5:00 a.m. until 10:00 p.m. each day.
   B. The daily number of trucks allowed to drive on each segment of haul road during the harvest season, as defined as the months of June through November, and during the non-harvest season, as defined as the months of December through May, shall be limited to the following amounts:

   \[\text{Harvest Season}\]
   Grain Receiving Trucks – 275 per day
   DDGS Loadout Trucks – 25 per day
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Ethanol Loadout Trucks – 25 per day
Denaturant Delivery Trucks – 5 per day

*Non-Harvest Season*
Grain Receiving Trucks – 125 per day
DDGS Loadout Trucks – 25 per day
Ethanol Loadout Trucks – 25 per day
Denaturant Delivery Trucks – 5 per day

C. Ozark Ethanol, LLC shall keep records to ensure the limits of this Special Condition and use Attachment G or other equivalent forms for this purpose.

15. Ethanol Production Limits
A. Ozark Ethanol, LLC shall limit its annual undenatured ethanol production rate to 65,000,000 gallons per twelve (12) consecutive month period.

B. To demonstrate compliance with Special Condition 15.A., Ozark Ethanol, LLC shall keep a record of the amount of ethanol produced per twelve (12) consecutive month period. Attachment H, or equivalent forms, shall be used for this purpose.

16. 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 total, combined cooling water circulation rate of the seven cells shall not exceed 2,256,000 gallons per hour.

C. The drift loss from the towers shall not exceed 0.002 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 2,000 parts per million (ppm) for any 12 consecutive calendar month period. A TDS sample shall be collected at least once per calendar month.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

17. Control Equipment – Ethanol Loadout Flare
   A. The ethanol loadout flare (EP17) must be in use at all times to control emissions from denatured ethanol truck loadout into non-dedicated tanks (P50). The flare shall be operated and maintained in accordance with the manufacturer’s specifications.
   B. Ozark Ethanol, LLC shall maintain an operating and maintenance log for the flare 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.
      4) A written record of the total number of hours the flare is used including the date and time of the usage.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW
Project Number: 2007-07-073
Installation ID Number: 217-0045
Permit Number:
Ozark Ethanol, LLC Complete: July 16, 2007
Southeast of US Hwy 54 and MO Hwy 43 Intersection Reviewed: July 16, 2007
Parent Company:
Ozark Ethanol, LLC
P.O. Box 43
Liberal, MO 64762
Vernon County, S11, T35N, R32W

REVIEW SUMMARY

- Ozark Ethanol, LLC has applied for authority to construct a new ethanol production facility with the capacity to produce 65 million gallons of undenatured anhydrous ethanol annually.

- HAPs of concern from this process are acetaldehyde, acrolein, formaldehyde and methanol. The main HAPs of concern are acrolein and acetaldehyde. The SMAL levels for acrolein and acetaldehyde were exceeded. Acrolein passed dispersion modeling, so no limits were required for this HAP. Acetaldehyde did not pass dispersion modeling, so a limit to below the SMAL level (9.0 tons per 12-month rolling total) was voluntarily taken.

- New Source Performance Standards (NSPS) apply to this installation. Specifically, 40 CFR Part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, applies to the storage tanks (TK1-TK5); Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional-Steam Generating Units applies to the boilers (EP13 and EP14); Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI) applies to this installation.

- NSPS Subpart NNN, Standards of Performance for Volatile Organic Compound Emissions from SOCMI Distillation Operations, and Subpart RRR, Standards of Performance for Volatile Organic Compound Emissions from SOCMI Reactor Processes, do not apply to this installation. Subparts NNN and RRR contain the provision that they do not apply to ethanol plants that use a biological process to ferment the starches in corn into ethanol. Subpart XX, Standards of Performance for Bulk Gasoline Terminals, does not apply since the fuel ethanol (alcohol/petroleum distillate blend) manufactured by the installation does not satisfy the Subpart XX definition of gasoline.
• Air pollution control equipment is used at this facility and includes baghouses, vent filters, a fermentation scrubber, an RTO, and a flare.

• Emissions testing is required for all control equipment.

• This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of PM$_{10}$, NO$_x$, and VOC are above de minimis levels.

• Ambient air quality modeling was performed to determine the ambient impact of PM$_{10}$ and NO$_x$.

• This installation is located in Vernon County, an attainment area for all criteria air pollutants.

• This installation is on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

• An Intermediate Operating Permit is required for this installation within 30 days of equipment startup.

• Approval of this permit is recommended with special conditions.

**INSTALLATION/PROJECT DESCRIPTION**

The purpose of this project is to construct a new ethanol production facility with the capacity to produce 65 million gallons of undenatured ethanol annually. As this is a new facility, no permits have been issued to Ozark Ethanol, LLC from the Air Pollution Control Program.

Grain is loaded in by railcar or truck, dumped into receiving pits, and conveyed by augers, conveyors, elevators, and then transfer conveyors to corn storage silos. To ensure even flow, the corn is then transferred to a surge bin before it is sent to the scalping screen to remove debris, and then to the hammermills to break the grain into very small pieces, smaller than what roll crushers would accomplish in a typical wet corn milling process. The corn is now ready for wetting and subsequent fermentation.

The milled corn is mixed with condensate from the thin stillage evaporators in the slurry tank. This mixture is fed to the liquefaction tank to complete the soaking of the grain. This mixture is then mixed with liquid yeast from the yeast tank, and fed to four fermenters in series (none of which have the added oxygen often used to grow the yeast aerobically before fermentation). As the wort is transferred from fermenter to fermenter, the oxygen content is reduced and the ethanol content, increased. The final fermentation product, called beer, is held in the beerwell before proceeding to distillation and separation of DDGS and WDGS, the coproducts.
The beer is distilled in a three-column distillation process consisting of a beer stripper, side stripper, and rectifier column. The products of the distillation column are hydrous ethanol (a mixture of ethanol and water, where some of the water is bound to the ethanol molecules) and whole stillage, consisting of solids and water. The stripper and rectifier are used to remove non-ethanol alcohols and other undesirable byproducts not separated by the distillation column, and these fermentation byproducts are sent to the RTO. The hydrous ethanol is dehydrated in the molecular sieves to remove any remaining water to produce a 200-proof ethanol product. Product is denatured with gasoline, loaded out under flare control, and shipped via tanker truck and railcar.

The whole stillage contains both dissolved and undissolved solids and is centrifuged to produce a wet cake and supernatant/centrate, called thin stillage. The wet cake is dried in the DDGS dryer, then cooled in the DDGS cooler. The thin stillage passes through an evaporation system, the condensate from which feeds the slurry tank, and the concentrated liquid, called dissolved solids syrup (DSS) is added to the DDGS dryer.

If the wetcake is not dried, the WDGS is conveyed from the centrifuges to the optional wetcake loadout where it is transported to local cattle feed operations. If it is dried, the DDGS is sent to a storage building, from which it is transferred to elevator by front end loaders to loadout spouts for shipping by truck or rail.

Steam is required for process heat. The plant will use two 92.4 MMBtu/hr-natural gas fired boilers (EP15 and EP16) for this purpose. For the facility’s cooling requirements, a 37,600 gallon/minute cooling tower (EP-18-24, 7 cells) will be used.

Emergency equipment will be available. A 27.20 MMBtu/hr-emergency generator (EP16) and a 2.11 MMBtu/hr-water pump (EP15) will be used only in the case of a power loss or fire. These units will also undergo periodic testing.

EMISSIONS/CONTROLS EVALUATION

The pollutants of concern for the purpose of this review are PM$_{10}$, NO$_x$, SO$_x$, VOCs, CO, and HAPs. These emissions are discussed according to the processes that emit them: Fermentation and Distillation, DDGS Drying and Storage, and Tanks and Loadout.

Grain Handling and Storage
PM$_{10}$ is primarily emitted from the grain handling, storage, milling and drying processes. The emission factors for estimating PM$_{10}$ emissions from these 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 (5/98). Baghouses are used to control PM$_{10}$ emissions from grain handling and milling operations with a control efficiency of 99% (EP01, EP02, EP06, EP07). However, the applicant has provided estimates of emissions from these operations that exceed AP-42 estimations using manufacturer’s guarantees. Therefore, these operations will be tested to verify emissions.

Fermentation and Distillation
VOCs and HAPs are primarily emitted from fermentation EP11, CO$_2$ Scrubber) and
distillation processes (EP12, RTO). Potential emissions of PM\textsubscript{10}, VOC and HAPs emitted from these processes were estimated by the applicant. Under normal operation, emissions from the scrubbers will be vented to the atmosphere. Therefore, emissions from these processes will be quantified and included when determining compliance with the VOC and HAPs limits in this permit.

Fugitive leaks will be controlled in accordance with New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, 40 CFR Part 60, Subpart VV.

DDGS Drying and Storage
VOCs, HAPs, SO\textsubscript{x}, CO and PM\textsubscript{10} are emitted from DDGS drying. Multicyclones are used to control emissions of PM\textsubscript{10} for the DDGS drying with an expected control efficiency of 90%. VOC and HAP emissions from the DDGS dryer are controlled using a regenerative thermal oxidizer.

The DDGS is pneumatically transferred to an enclosed storage building and loaded out onto railcars and trucks. Emissions from the handling and loading out of DDGS are controlled by baghouses using negative pressure.

Tanks and Loadout
VOCs are emitted from storage tanks and truck/rail loadout. Fugitive leaks will be controlled in accordance with New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, 40 CFR Part 60, Subpart VV. Storage tank emissions were calculated using TANKS 4.0.

Loadout emissions were determined using AP-42, Section 5.2, Transportation and Marketing of Petroleum Liquids. It was assumed that dedicated ethanol tanks were not used for truck loadout. Therefore, loading loss emissions were calculated using gasoline as the displaced vapor. For rail loadout emissions, dedicated ethanol tanks were used to determine loading loss.

Haul Roads
Unpaved haul road emissions were obtained from AP-42, Section 13.2.2, Unpaved Roads (9/98). A control efficiency of 95% is given to the haul roads for paving and washing.

Combustion
Combustion emissions were determined as follows. For the DDGS Dryer/RTO (EP9), the HAPs were calculated using AP-42 Section 1.4 External Combustion Sources (5\textsuperscript{th} Edition), and the other emissions were calculated using industry data. For the boilers (EP13 and EP14) and the ethanol loadout flare (EP17), the NO\textsubscript{x} and CO were calculated with manufacturer’s data, and the rest of the emissions were calculated with AP-42, Section 1.4 Natural Gas Combustion. The NO\textsubscript{x} and CO from these emission points came from manufacturer’s data. The emissions of all criteria pollutants from the pilot flame of the flare (EP17) came from AP-42 Section 1.4 Natural Gas Combustion. Finally for the emergency equipment, the emission factors for the emergency generator
(EP16) came from AP-42 Section 3.4 Large Stationary Diesel and All Stationary Dual-Fired Engines, with a NOx emission limit from NSPS Subpart III; and, for the emergency fire pump (EP15), from AP-42 Section 3.3 Gasoline and Diesel Industrial Engines.

Testing by other ethanol installations has demonstrated that VOC, CO, SOx, and HAPs are emitted from these processes in larger quantities than previously expected. Since Ozark Ethanol, LLC is a named source, the major source level for this installation is 100 tons per year of any criteria air pollutant, 10 tons per year for each individual HAP and 25 tons per year for aggregate HAPs. Therefore, a 100-ton per year limitation was set forth on the emissions of VOC and CO, each and a 10/25-ton per year limit was given for HAPs. The HAPs of concern from these processes are acetaldehyde, acrolein, formaldehyde and methanol. However, acetaldehyde is the HAP with the greatest emission rate.

Performance tests required by this permit will verify the emission rate of the aforementioned HAPs and determine compliance with the emission limitation given in Special Condition 1(C). If these limitations are exceeded, the applicant will be required to curtail production or install control equipment to meet these limitations.

This is a new installation. Therefore, no existing potential or actual emissions were determined. The installation conditioned potential emissions were based upon findings from other ethanol plants. Special conditions for emissions of VOC, HAPs and CO are required for review under Section (6) of Missouri State Rule 10 CSR 10-6.060 rather than for major source review under Section (8) or Section (9). These limitations were requested by the applicant. The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regulatory De Minimis Levels</th>
<th>Existing Potential Emissions</th>
<th>Existing Actual Emissions (EIQ)</th>
<th>Potential Emissions of the Application</th>
<th>New Installation Conditioned Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM₁₀</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>35.5</td>
<td>N/A</td>
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<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>16.3</td>
<td>N/A</td>
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<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>69.6</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>80.8</td>
<td>&lt;100</td>
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<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>71.5</td>
<td>&lt;100</td>
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<tr>
<td>HAPs (acetaldehyde)</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>9.1/13.9</td>
<td>&lt;9.0/25</td>
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</tbody>
</table>

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

** Findings from other ethanol plants have indicated that VOC, CO, and HAP emissions are greater than previously expected. Therefore, the emissions of equipment in this application are limited to below major source levels. The emission of acetaldehyde is voluntarily limited to below its SMAL level.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule
10 CSR 10-6.060, Construction Permits Required. Potential emissions of PM$_{10}$ and NO$_x$ are above de minimis levels.

APPLICABLE REQUIREMENTS

Ozark Ethanol, 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 April 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 10-3.090

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 Volatile Organic Liquid Storage Vessels for

- Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.060

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was performed to determine the ambient impact of PM$_{10}$ and NO$_x$ because they are above the de minimis levels, as was VOC. No model is currently available, however, which can accurately predict ambient ozone concentrations caused by this installation’s VOC emissions. Refer to the modeling memorandum with subject “Ozark Ethanol, LLC Ambient Air Quality Impact Analysis (AAQIA) July 16, 2007 Submittal” for further details.

The SMAL levels for acrolein and acetaldehyde were exceeded. Acrolein passed dispersion modeling, so no limits were required for this HAP. Acetaldehyde did not pass dispersion modeling, so a limit to below the SMAL level was voluntarily taken.

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.

Jeannie Kozak       Date
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated and received July 16, 2007, designating Ozark Ethanol, LLC as the owner and operator of the installation.


Attachment A: Monthly VOC Emission Tracking Record

Ozark Ethanol, LLC
Vernon County, S11, T35N, R32W
Project Number: 2007-07-073
Installation ID Number: 217-0045
Permit Number: 

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

Copy this sheet as needed

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
<th>Column C</th>
<th>Column D</th>
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<tbody>
<tr>
<td>Emission Point(s)</td>
<td>Description</td>
<td>Amount Processed</td>
<td>VOC Emission Factor</td>
<td>(a) VOC Emissions (tons)</td>
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(b) Total VOC Emissions Calculated for this Month in Tons:
(c) 12-Month VOC Emissions Total From Previous Month's Attachment A, in Tons:
(d) Monthly VOC Emissions Total (b) from Previous year's Attachment A, in Tons:
(e) Current 12-month Total of VOC Emissions in Tons : [(b) + (c) - (d)]

(a) \[ \text{Column E} = \text{Column C} \times \text{Column D} \times 0.0005 \]. Emission factor obtained from performance tests required by this permit
(b) Summation of \[ \text{Column E} \] in Tons;
(c) 12-Month VOC emissions total (e) from last month's Attachment A, in Tons;
(d) Monthly VOC emissions total (b) from previous year's Attachment A, in Tons;
(e) Calculate the new 12-month VOC emissions total.

A 12-Month VOC emissions total (e) of less than 100.0 tons indicates compliance.
Attachment B: Monthly CO Emission Tracking Record

Ozark Ethanol, LLC  
Vernon County, S11, T35N, R32W  
Project Number: 2007-07-073  
Installation ID Number: 217-0045  
Permit Number: ______

This sheet covers the period from _____________ to ___________.

(month, year)   (month, year)

Copy this sheet as needed

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<tbody>
<tr>
<td>Emission Point(s)</td>
<td>Description</td>
<td>Amount Processed</td>
<td>CO Emission Factor</td>
<td>(a) CO Emissions (tons)</td>
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(b) Total CO Emissions Calculated for this Month in Tons:

(c) 12-Month CO Emissions Total From Previous Month's Attachment B, in Tons:

(d) Monthly CO Emissions Total (b) from Previously year's Attachment B, In Tons:

(e) Current 12-month Total of CO Emissions in Tons : [(b) + (c) - (d)]

(a) \[\text{Column E} = \text{Column C} \times \text{Column D} \times 0.0005\]. 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 Attachment B, in Tons;

(d) Monthly CO emissions total (b) from previous year's Attachment 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.
Ozark Ethanol, LLC  
Vernon County, S11, T35N, R32W  
Project Number: 2007-07-073  
Installation ID Number: 217-0045  
Permit Number: ________

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

HAP Name: ____________________________  CAS No.: ____________________________

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<th>Column A</th>
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<td>Emission Point(s)</td>
<td>Description</td>
<td>Amount Processed</td>
<td>Individual HAP Emission Factor</td>
<td>(a) Individual HAP Emissions (tons)</td>
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(b) Total Individual HAP Emissions Calculated for this Month in Tons: 

c) 12-Month Individual HAP Emissions Total From Previous Month’s Attachment C, in Tons: 

d) Monthly Individual HAP Emissions Total (b) from Previously year’s Attachment C, in Tons: 

e) Current 12-month Total of Individual HAP Emissions in Tons: [(b) + (c) - (d)]

(a) \[ |Column E| = |Column C| \times |Column D| \times 0.0005.\] 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 Attachment C, in Tons;  
(d) Monthly Individual HAP emissions total (b) from previous year’s Attachment C, in Tons;  
(g) Calculate the new 12-month Individual HAP emissions total.  

**A 12-Month Individual acetaldehyde emissions total (e) of less than 9.0 tons indicates compliance.**
Attachment D: Monthly Combined HAP Emission Tracking Record

Ozark Ethanol, LLC  
Vernon County, S11, T35N, R32W  
Project Number: 2007-07-073  
Installation ID Number: 217-0045  
Permit Number: ________

This sheet covers the period from ________ to ________.

(month, year)   (month, year)

Copy this sheet as needed

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<td>Emission Point(s)</td>
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<td>HAP Emission Factor</td>
<td>(a) HAP Emissions (tons)</td>
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</table>

(b) Total HAP Emissions Calculated for this Month in Tons:

c) 12-Month HAP Emissions Total From Previous Month's Attachment D, in Tons:

(d) Monthly HAP Emissions Total (b) from Previously year's Attachment D, In Tons:

(e) Current 12-month Total of HAP Emissions in Tons : [(b) + (c) - (d)]

(a) \[\text{Column E} = \text{Column C} \times \text{Column D} \times 0.0005. \] 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 Attachment D, in Tons;

d) Monthly HAP emissions total (b) from previous year's Attachment 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.
Attachment E – Emergency Equipment Tracking Sheet

Ozark Ethanol, LLC  
Vernon County, S11, T35N, R32W  
Project Number: 2007-07-073  
Installation ID Number: 217-0045  
Permit Number: ________

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

<table>
<thead>
<tr>
<th>EMERGENCY GENERATOR</th>
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<tbody>
<tr>
<td>Date (Month/Year)</td>
<td>Hours of Operation</td>
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<tr>
<th>EMERGENCY FIRE PUMP</th>
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<td>Date (Month/Year)</td>
<td>Hours of Operation</td>
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* The 12-month total is determined by the addition of the current month to the total of the previous 11 months. The fire pump and generator are each allowed **250** hours of operation during this 12-month period.
**Attachment F – Grain Receiving and DDGS Loadout**

Ozark Ethanol, LLC  
Vernon County, S11, T35N, R32W  
Project Number: 2007-07-073  
Installation ID Number: 217-0045  
Permit Number: ______

This sheet covers the period from __________ to __________.

(month, year)   (month, year)

<table>
<thead>
<tr>
<th>Date</th>
<th>*Type of Operation</th>
<th>**Tonnage</th>
<th>**Limit</th>
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* The type of operation is either Grain Receiving or DDGS Loadout.

** The following daily tonnage indicates compliance in harvest (June-November)/non-harvest (December-May) seasons: Grain Receiving (6,875 tons/3,125 tons), DDGS Loadout (625 tons/625 tons).
**Attachment G – Daily Truck Tracking**

Ozark Ethanol, LLC  
Vernon County, S11, T35N, R32W  
Project Number: 2007-07-073  
Installation ID Number: 217-0045  
Permit Number: ________

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

<table>
<thead>
<tr>
<th>Date</th>
<th>*Type of Truck</th>
<th>**Number of Trucks</th>
<th>**Limit</th>
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* The type of truck includes grain, ethanol, DDGS, and denaturant.

** The following number of trucks per day indicate compliance in harvest (June-November)/non-harvest (December-May) seasons: Grain (275 trucks/125 trucks), DDGS (25 trucks/25 trucks), Ethanol (25 trucks/25 trucks), Denaturant (5 trucks/5 trucks).
Attachment H – Annual Undenatured Ethanol Tracking Sheet.

Ozark Ethanol, LLC  
Vernon County, S11, T35N, R32W  
Project Number: 2007-07-073  
Installation ID Number: 217-0045  
Permit Number: ________

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Ethanol Production (Gallons)</th>
<th>*12-Month Ethanol Total (Gallons)</th>
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* The 12-month Ethanol Totals (Gallons) are a rolling total calculated by adding the month’s ethanol production to the monthly ethanol production of the previous eleven (11) months. A total of 65,000,000 gallons indicates compliance.
Dear Mr. Rose:

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 future 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 Jeannie Kozak at the departments’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or (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:jkl

Enclosures

c: Southwest Regional Office
   PAMS File 2007-07-073

   Permit Number: