



**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: **082016-006**

Project Number: 2016-03-052  
Installation ID: 035-0029

Parent Company: Politte Ready Mix

Parent Company Address: P.O. Box 368, Potosi, MO 63664

Installation Name: Politte - Ellsinore

Installation Address: Route 2, Box 2033, Ellsinore, MO 63937

Location Information: Carter County, S4 T26N R3E

Application for Authority to Construct was made for:  
Permitting existing concrete plant. 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.

  
Prepared by  
Kathy Kolb  
New Source Review Unit

  
Director of Designee  
Department of Natural Resources

**AUG 16 2016**

Effective Date

## 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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 source(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 using the contact information below.

### Contact Information:

Missouri Department of Natural Resources  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
(573) 751-4817

The regional office information can be found at the following website:

<http://dnr.mo.gov/regions/>

**SITE SPECIFIC SPECIAL CONDITIONS:**

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

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*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."*

1. Best Management Practices Requirement  
Politte - Ellsinore shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing BMPs as defined in Attachment AA.
2. Annual Emission Limit
  - A. Politte - Ellsinore shall emit less than 15.0 tons of PM10 in any 12-month period from the entire installation.
  - B. Politte - Ellsinore shall demonstrate compliance with Special Condition 2.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.
3. Control Device Requirement-Baghouse
  - A. Politte - Ellsinore shall control emissions from the equipment listed below using baghouses as specified in the permit application.
    - 1) Cement Silo
    - 2) Supplement Silo
    - 3) Weigh Hopper
  - B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
  - C. Replacement filters for the 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. Politte - Ellsinore shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

**SITE SPECIFIC SPECIAL CONDITIONS:**

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

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- E. Politte - Ellsinore shall maintain a copy of the baghouse manufacturer's performance warranty on site.
  - F. Politte - Ellsinore shall maintain an operating and maintenance log for the baghouses 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.
4. Record Keeping Requirement  
Politte - Ellsinore shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources' personnel upon request.
5. Reporting Requirement  
Politte - Ellsinore shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after any exceedances of the limitations imposed by this permit.

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

Project Number: 2016-03-052  
Installation ID Number: 035-0029  
Permit Number:

Politte - Ellsinore  
Route 2, Box 2033  
Ellsinore, MO 63937

Complete: March 29, 2016

Parent Company:  
Politte Ready Mix  
P.O. Box 368  
Potosi, MO 63664

Carter County, S4 T26N R3E

PROJECT DESCRIPTION

This plant is not a new construction project. Politte Ready Mix purchased this plant from Jeremiah Miller in January of 2013. During a compliance visit, it was noticed that the plant did not have (and appeared to never have had) environmental permits. Water permits have been applied for and have been issued. It is Politte Ready Mix's desire to get the plant into compliance. The plant was constructed in the summer of 2011.

The concrete plant is a truck mix plant with a MHDR of 120 tons per hour. There is only a cement silo that is controlled by a baghouse. There is no supplement silo, and the aggregate weigh hopper and truck loading is not controlled by the baghouse. There are three haul roads. One is 160 feet for the receiving of sand, another is 193 for the receiving of aggregate material and the third road is 363 feet for the final concrete product. The plant will be powered off the grid.

The applicant is using one of the methods described in Attachment AA, "Best Management Practices," to control emissions from haul roads and vehicular activity areas.

This installation is located in Carter 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.

No permits have been issued to Politte - Ellsinore from the Air Pollution Control Program.

## TABLES

The table below summarizes the emissions of this project. There are no existing actual emissions since an EIQ has never been submitted. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the annual PM<sub>10</sub> emission limit of 15.0 tons per year for portable plants in order to avoid refined modeling according to 10 CSR 10-6.060 (6)(B)3.

Table 1: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	<sup>a</sup> Potential Emissions of Process Equipment (tons/yr)	Existing Actual Emissions (No EIQ)	<sup>a</sup> Potential Emissions of the Application	<sup>b</sup> Conditioned Potential Emissions
PM	25.0	88.98	N/A	110.46	47.79
PM <sub>10</sub>	15.0	25.97	N/A	34.67	<15.0
PM <sub>2.5</sub>	10.0	21.08	N/A	22.84	9.88
SO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A
NO <sub>x</sub>	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A	N/A
GHG (CO <sub>2</sub> e)	75,000 / 100,000	N/A	N/A	N/A	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/A	N/A	N/A

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

<sup>a</sup>Includes site specific haul road and storage pile emissions

<sup>b</sup>Conditioned potential emissions of the application represent a voluntary PM<sub>10</sub> limit to avoid refined modeling at the time of permitting.

## EMISSIONS CALCULATIONS

Emissions for the project were calculated using emission factors found in the United States EPA document AP-42 *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42).

Emissions from the concrete batch plant were calculated using emission factors from AP-42 Section 11.12 "Concrete Batching," June 2006. This section cites Equation (1) in Section 13.2.4 "Aggregate Handling and Storage Piles," November 2006 for calculating the emissions from aggregate and sand transfer. The cement silo, supplement silo, and aggregate weigh hopper are controlled with baghouse, so the controlled emission factors were used. There is not supplement silo. The weigh hopper was not controlled by a baghouse and therefore emissions from the aggregate weigh hopper were

calculated using AP-42 Section 13.2.4, Equation (1). Emissions from the mixer loading/mix truck loading was calculated using AP-42 Section 13.2.4, Equation (1). These emissions are not controlled, so the uncontrolled emission factors were used.

Emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.2 "Unpaved Roads," November 2006. A 90% control efficiency for PM and PM<sub>10</sub> and a 74% control efficiency for PM<sub>2.5</sub> were applied to the emission calculations for the use of BMPs. Emissions from load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4. The moisture content of the aggregate is 0.7% by weight. Emissions from wind erosion of storage piles were calculated using an equation found in the Air Pollution Control Program's Emissions Inventory Questionnaire Form 2.8 "Storage Pile Worksheet."

### 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 conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the annual PM<sub>10</sub> emission limit of 15.0 tons per year for portable plants in order to avoid refined modeling according to 10 CSR 10-6.060 (6)(B)3.

### APPLICABLE REQUIREMENTS

Politte - Ellsinore 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.

### GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- No Operating Permit is required for this installation.
- *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
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.

## 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*, it is recommended that this permit be granted with special conditions.

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated March 21, 2016, received March 21, 2016, designating Politte Ready Mix as the owner and operator of the installation.





## Attachment AA: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the plant is operating.

1. Pavement
  - A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions while the plant is operating.
  - B. Maintenance and repair of the road surface 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. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
  
2. Application of Chemical Dust Suppressants
  - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
  - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
  - C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources' personnel upon request.
  
3. Application of Water-Documented Daily
  - A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
  - B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
  - C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
  - D. The operator shall record the date, volume of water application and total surface area of active haul roads or the amount of precipitation that day. The operators shall also record the rationale for not watering (e.g. freezing conditions or not operating).
  - E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources' personnel upon request.

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>MMBtu</b> ....	Million British thermal units
<b>°F</b> .....	degrees Fahrenheit	<b>MMCF</b> .....	million cubic feet
<b>acfm</b> .....	actual cubic feet per minute	<b>MSDS</b> .....	Material Safety Data Sheet
<b>BACT</b> .....	Best Available Control Technology	<b>NAAQS</b> ...	National Ambient Air Quality Standards
<b>BMPs</b> .....	Best Management Practices	<b>NESHAPs</b> ..	National Emissions Standards for Hazardous Air Pollutants
<b>Btu</b> .....	British thermal unit	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>NSPS</b> .....	New Source Performance Standards
<b>CAS</b> .....	Chemical Abstracts Service	<b>NSR</b> .....	New Source Review
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>PM</b> .....	particulate matter
<b>CFR</b> .....	Code of Federal Regulations	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>CO</b> .....	carbon monoxide	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>ppm</b> .....	parts per million
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PTE</b> .....	potential to emit
<b>CSR</b> .....	Code of State Regulations	<b>RACT</b> .....	Reasonable Available Control Technology
<b>dscf</b> .....	dry standard cubic feet	<b>RAL</b> .....	Risk Assessment Level
<b>EQ</b> .....	Emission Inventory Questionnaire	<b>SCC</b> .....	Source Classification Code
<b>EP</b> .....	Emission Point	<b>scfm</b> .....	standard cubic feet per minute
<b>EPA</b> .....	Environmental Protection Agency	<b>SDS</b> .....	Safety Data Sheet
<b>EU</b> .....	Emission Unit	<b>SIC</b> .....	Standard Industrial Classification
<b>fps</b> .....	feet per second	<b>SIP</b> .....	State Implementation Plan
<b>ft</b> .....	feet	<b>SMAL</b> .....	Screening Model Action Levels
<b>GACT</b> .....	Generally Available Control Technology	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>GHG</b> .....	Greenhouse Gas	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>gpm</b> .....	gallons per minute	<b>tph</b> .....	tons per hour
<b>gr</b> .....	grains	<b>tpy</b> .....	tons per year
<b>GWP</b> .....	Global Warming Potential	<b>VMT</b> .....	vehicle miles traveled
<b>HAP</b> .....	Hazardous Air Pollutant	<b>VOC</b> .....	Volatile Organic Compound
<b>hr</b> .....	hour		
<b>hp</b> .....	horsepower		
<b>lb</b> .....	pound		
<b>lbs/hr</b> .....	pounds per hour		
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		
<b>m/s</b> .....	meters per second		
<b>Mgal</b> .....	1,000 gallons		
<b>MW</b> .....	megawatt		
<b>MHDR</b> .....	maximum hourly design rate		

Mr. Jimmy Gibson  
Managing Director  
Politte - Ellsinore  
PO Box 368  
Potosi, MO 63664

RE: New Source Review Permit - Project Number: 2016-03-052

Dear Mr. Gibson:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions 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 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty 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 administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oa.mo.gov/ahc](http://www.oa.mo.gov/ahc).

Mr. Jimmy Gibson  
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If you have any questions, please do not hesitate to contact Kathy Kolb, 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

Susan Heckenkamp  
New Source Review Unit Chief

SH:kkj

Enclosures

c: Southeast Regional Office  
PAMS File: 2016-03-052

Permit Number: