

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: 122016 - 004

Project Number: 2015-04-071
Installation Number: 143-0070

Parent Company: Southeast Cooperative Service Company

Parent Company Address: PO Box 340, Advance, MO 63730

Installation Name: Southeast Cooperative Service Company - Morehouse

Installation Address: 701 Hwy Z, Morehouse, MO 63868

Location Information: New Madrid County, S31, T26N, R13E

Application for Authority to Construct was made for:
Construction of a new fertilizer facility to replace an existing structure. This review was conducted in accordance with Section (5), 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 or Designee
Department of Natural Resources

DEC 14 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 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 Department's 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.

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."

Southeast Cooperative Service Company - Morehouse
New Madrid County, S31, T26N, R13E

1. **PM₁₀ Emission Limitation**
 - A. Southeast Cooperative Service Company - Morehouse shall emit less than 15.0 tons of PM₁₀ in any consecutive 12-month period from the entire installation (see Table 1).
 - B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A.
2. **Record Keeping and Reporting Requirements**
 - A. Southeast Cooperative Service Company - Morehouse 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. These records shall include SDS for all materials used.
 - B. Southeast Cooperative Service Company - Morehouse shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 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 (5) REVIEW

Project Number: 2015-04-071

Installation ID Number: 143-0070

Permit Number:

122016 - 004

Installation Address:

Southeast Cooperative Service Company -
Morehouse
701 Hwy Z
Morehouse, MO 63868

Parent Company:

Southeast Cooperative Service Company
PO Box 340
Advance, MO 63730

New Madrid County, S31, T26N, R13E

REVIEW SUMMARY

- Southeast Cooperative Service Company - Morehouse has applied for authority to a new fertilizer facility.
- The application was deemed complete on May 21, 2015.
- HAP emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM, PM₁₀, and PM_{2.5} are conditioned below de minimis levels.
- This installation is located in New Madrid 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 since potential emissions of the application are below de minimis levels.

- Emissions testing is not required for the equipment.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Southeast Cooperative Service Company, Inc. is a farmer owned cooperative which operates a total of seven separate locations in Stoddard, New Madrid, Scott and Butler counties. Southeast Cooperative Service Company, Inc. is an agriculture input cooperative providing fuel, seed, fertilizer, feed agricultural chemicals and custom application. Their organization is not a grain handling facility other than seed (pre-packaged).

No permits have been issued to Southeast Cooperative Service Company - Morehouse from the Air Pollution Control Program.

PROJECT DESCRIPTION

Southeast Cooperative Service Company, Inc. - Morehouse plans to construct a new dry fertilizer operation to include a new 65' x 200' building consisting of ten 14' x 12' bays and a 24' covered porch for the loader. There will also be a 200' unloading belt that will fill the individual bays. A front end loader will transport the fertilizer from the bins to the blender. Each bay will hold 341.6 tons of dry fertilizer. There is also a 40' x 50' concrete pad located outside for shipping and a 16' x 200' pad for unloading for the facility.

The existing building that currently houses the fertilizer will be used to store equipment. All fertilizer business will be conducted at the new building.

The new emission units for the facility are summarized in the Table 1 below.

Table 1: Project Emissions Units

| Emission Point | Description | MHDR Tons per hour |
|----------------|-----------------------------------|--------------------|
| EP-01 | Fertilizer Receiving | 120 |
| EP-02 | Unloading belt | 120 |
| EP-03 | Storage Bins | 120 |
| EP-04 | Loader | 120 |
| EP-05 | Blender | 120 |
| EP-06 | Loadout/Conveyor | 120 |
| EP-07 | Haul Roads and Vehicular Activity | 10.14 VMT/hr |

The unpaved haul roads will be 100 feet from the public road to the scale and 300 feet from the scale to the building.

The length of the building is 200 feet and the weigh hopper/blender is located in the middle of that length, therefore the maximum length of the distance traveled by the front end loader is approximately 100 feet. This area is paved.

EMISSIONS/CONTROLS EVALUATION

The fertilizer PM and PM₁₀ emission factors for EP-01 through EP-06 were obtained from the ammonium nitrate bulk loading Source Classification Code (SCC) 30102709, each at 0.02 pounds per ton of fertilizer, and the emission factor of 0.005 pounds per ton of fertilizer for PM_{2.5}. These emission factors were obtained from WebFIRE (Factor Information Retrieval System), EPA's online emission factor repository.

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. Emissions from vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.1 Paved Roads, January 2011.

The following table provides an emissions summary for this project. Since this is the first permit for this facility, there are no existing potential emissions and no existing actual emissions. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tons per year)

| Pollutant | Regulatory <i>De Minimis</i> Levels | Existing Potential Emissions | Existing Actual Emissions | Potential Emissions of the Application | New Installation Conditioned Potential |
|-------------------------|---|------------------------------------|---------------------------------|---|---|
| PM | 25.0 | N/A | N/A | 99.45 | 20.40 |
| PM ₁₀ | 15.0 | N/A | N/A | 73.12 | <15.0 |
| PM _{2.5} | 10.0 | N/A | N/A | 16.87 | 3.46 |
| SO _x | 40.0 | N/A | N/A | N/A | N/A |
| NO _x | 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 ₂ 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 |
| HAPs | 10.0/25.0 | N/A | N/A | N/A | N/A |

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

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM, PM₁₀, and PM_{2.5} are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

Southeast Cooperative Service Company - Morehouse 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
- *Operating Permits*, 10 CSR 10-6.065 is not required because the facility's are conditioned below de minimis.
- *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 Emissions From Industrial processes*, 10 CSR 10-6.400. The particulate emissions from the fertilizer operation that is housed inside a building could be vented through a stack. Therefore potential emission rate of 14.4 pounds per hour of PM is less than 53.1 lbs/hr (Process Rate Rule), and therefore complies with this regulation.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), 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 April 21, 2015, received April 21, 2015, designating Southeast Cooperative Service Company as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

| | | | |
|-------------------------------|--|-------------------------------|--|
| % | percent | m/s | meters per second |
| °F | degrees Fahrenheit | Mgal | 1,000 gallons |
| acfm | actual cubic feet per minute | MW | megawatt |
| BACT | Best Available Control Technology | MHDR | maximum hourly design rate |
| BMPs | Best Management Practices | MMBtu .. | Million British thermal units |
| Btu | British thermal unit | MMCF | million cubic feet |
| CAM | Compliance Assurance Monitoring | MSDS | Material Safety Data Sheet |
| CAS | Chemical Abstracts Service | NAAQS .. | National Ambient Air Quality Standards |
| CEMS | Continuous Emission Monitor System | NESHAPs | National Emissions Standards for Hazardous Air Pollutants |
| CFR | Code of Federal Regulations | NO_x | nitrogen oxides |
| CO | carbon monoxide | NSPS | New Source Performance Standards |
| CO₂ | carbon dioxide | NSR | New Source Review |
| CO_{2e} | carbon dioxide equivalent | PM | particulate matter |
| COMS | Continuous Opacity Monitoring System | PM_{2.5} | particulate matter less than 2.5 microns in aerodynamic diameter |
| CSR | Code of State Regulations | PM₁₀ | particulate matter less than 10 microns in aerodynamic diameter |
| dscf | dry standard cubic feet | ppm | parts per million |
| EIQ | Emission Inventory Questionnaire | PSD | Prevention of Significant Deterioration |
| EP | Emission Point | PTE | potential to emit |
| EPA | Environmental Protection Agency | RACT | Reasonable Available Control Technology |
| EU | Emission Unit | RAL | Risk Assessment Level |
| fps | feet per second | SCC | Source Classification Code |
| ft | feet | scfm | standard cubic feet per minute |
| GACT | Generally Available Control Technology | SDS | Safety Data Sheet |
| GHG | Greenhouse Gas | SIC | Standard Industrial Classification |
| gpm | gallons per minute | SIP | State Implementation Plan |
| gr | grains | SMAL | Screening Model Action Levels |
| GWP | Global Warming Potential | SO_x | sulfur oxides |
| HAP | Hazardous Air Pollutant | SO₂ | sulfur dioxide |
| hr | hour | tph | tons per hour |
| hp | horsepower | tpy | tons per year |
| lb | pound | VMT | vehicle miles traveled |
| lbs/hr | pounds per hour | VOC | Volatile Organic Compound |
| MACT | Maximum Achievable Control Technology | | |
| µg/m³ | micrograms per cubic meter | | |



Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

DEC 14 2016

Mr. John Bishop
General Manager
Southeast Cooperative Service Company - Morehouse
PO Box 340
Advance, MO 63730

RE: New Source Review Permit - Project Number: 2015-04-071

Dear Mr. Bishop:

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.

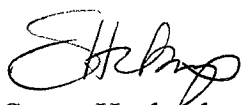
If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date 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, Truman State Office Building, Room 640, 301 W. High Street, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

Mr. John Bishop
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If you have any questions regarding this permit, please do not hesitate to contact Kathy Kolb, at the Department of Natural Resources' 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: 2015-04-071

Permit Number: 122016-004