

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: **022012-001** Project Number: 2011-10-011

Parent Company: Vagrimum

Parent Company Address: 13131 Lake Fraser Drive SE.,
Calgary, Alberta, Canada T2J 7E8

Installation Name: Crop Production Services, Cooter, MO

Installation Address: 179 Lynn Circle, PO Box 158, Cooter, MO 63839

Location Information: Pemiscot County, S16, T16N, 12E

Application for Authority to Construct was made for:
A dry fertilizer warehouse. 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.

FEB - 2 2012

EFFECTIVE DATE

Handwritten signature of Kynal Moore in cursive script.

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

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

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

You must notify the 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.

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Project No.	2011-10-011

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."

Crop Production Services
Pemiscot County, S16, T16N, 12E

1. Emission Limitation
 - A. Crop Production Services (Cooter, MO) shall emit less than 15.0 tons of particulate matter less than ten (10) microns in diameter (PM₁₀) in any consecutive 12 month period from emission units (EU1 through EU10) shown in Table 2.
 - B. Crop Production Services (Cooter, MO) shall maintain an accurate record of PM₁₀ emitted into the atmosphere from emission units (EU1 through EU10). Attachment A or an equivalent form shall be used for this purpose. Crop Production Services (Cooter, MO) 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.
 - C. Crop Production Services (Cooter, MO) shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1.B. indicate that the source exceeds the limitation of Special Condition Number 1.A.
2. Haul Road Watering - Crop Production Services (Cooter, MO) shall water haul roads whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary.
3. Crop Production Services (Cooter, MO) shall submit potential emissions calculations of all existing equipment and haul roads for all pollutants emitted at the Cooter facility; shall also include equipment description, design rates, any controls, etc. Crop Production Services shall submit evaluation to the Construction Permit Unit at PO Box 176, Jefferson City, MO 65102. Crop Production Services (Cooter, MO) shall submit the evaluation within three months of permit issuance.

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

Project Number: 2011-10-011
Installation ID Number: 155-0076
Permit Number:

Crop Production Services
179 Lynn Circle
PO Box 158
Cooter, MO 63839

Complete: November 2011

Parent Company:
Vagrium
13131 Lake Fraser Drive SE.
Calgary, Alberta, Canada T2J 7E8

Pemiscot County, S6, T16N, R12E

REVIEW SUMMARY

- Crop Production Services (Cooter, MO) has applied for authority to construct the fertilizer receiving, storage, and distribution equipment.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment. NSPS 40 CFR 60 Subpart X, *Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities*, does not apply to the proposed equipment because the facility does not store triple superphosphate fertilizer.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (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 (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM are above de minimis levels, but below major source levels. Potential emissions of PM₁₀ are conditioned to below de minimis levels.
- This installation is located in Pemiscot County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Ambient air quality modeling was not performed since potential emissions of the application are

limited to below de minimis levels.

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

INSTALLATION DESCRIPTION

Crop Production Services is an existing fertilizer and seed storage facility in Pemiscot County, Missouri. The facility stores urea, potash, di-ammonium phosphate, ammonium sulfate, ESN, and triple fertilizers. This facility also does seed coating and repackaging of seed to 50 pounds (lb.) bags and farmers' seed carts. Chemicals are stored in diked facilities and are sold to farmers in bulk tanks or packages. There are no existing construction permits nor are there any operating permits from the Air Pollution Control Program for this facility.

PROJECT DESCRIPTION

Crop Production Services proposes to construct a new dry fertilizer warehouse to be located at 179 Lynn Circle in Pemiscot County. This new installation is being designed for a maximum hourly production rate of 200 tons/hr, but with a bottleneck of 85 tons/hr at EU5 for the front end loader loading into the fertilizer blender.

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

Table 1: Project Emissions Units

Point ID	Description	MHDR	MHDR (Bottlenecked)	Units
EU1	Receiving Pit	200	85	ton fertilizer / hr
EU2	Conveyor to Bucket Elevator	200	85	ton fertilizer / hr
EU3	Bucket Elevator to Overhead Conveyor	200	85	ton fertilizer / hr
EU4	Overhead Conveyor to Storage Bins	200	85	ton fertilizer / hr
EU5	Front End Leader To Blender	85	85	ton fertilizer / hr
EU6	Fertilizer Blender	200	85	ton fertilizer / hr
EU7	Blender to Conveyor	200	85	ton fertilizer / hr
EU8	Conveyor to Trucks	200	85	ton fertilizer / hr
EU9	Haul Road-Receiving	1.7523	1.7523	VMT/hr
EU10	Haul Road-Shipping	1.8973	1.8973	VMT/hr

VMT = Vehicle miles travelled

EMISSIONS/CONTROLS EVALUATION

The fertilizer PM₁₀ emission factors for EU1 through EU10 were obtained from the ammonium nitrate bulk loading Source Classification Code (SCC) 30102709, each at 0.02 pounds per ton of fertilizer. The control efficiency of 3.7% for building enclosure was obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Appendix B.2. Potential emissions from the 825 foot haul road were calculated assuming 50% control efficiency for undocumented watering. Potential emissions from the unpaved haul roads were calculated using AP-42 Section 13.2.2 *Unpaved Roads*, November 2006.

The following table provides an emissions summary for this project. The existing facility has not been previously permitted; therefore there are no Existing Potential Emissions and no Existing Actual Emissions. Crop Production Services, Cooter, MO is required to provide this information per special conditions.

Potential emissions of the project represent the potential of all equipment, assuming continuous operation (8,760 hours per year) with a bottleneck of 85 tons per hour.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/D	N/D	111.70	28.39
PM ₁₀	15.0	N/D	N/D	59.02	<15.0
PM _{2.5}	10.0	N/D	N/D	15.79	4.013
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
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 (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned to below de minimis levels. Potential emissions of PM are at minor source levels.

APPLICABLE REQUIREMENTS

Crop Production Services 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
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *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

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.

Kathy Kolb
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 30, 2011, received October 4, 2011, designating Crop Production Services (Cooter, MO), Incorporated as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey, dated October 27, 2011

Mr. Joe Lynn
Crop Production Services
PO Box 158
Cooter, MO 63829

RE: New Source Review Permit - Project Number: 2011-10-011

Dear Mr. Lynn:

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 and 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 have any questions regarding this permit, please do not hesitate to contact Kathy Kolb, at the departments' 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:kjl

Enclosures

c: Kansas City Regional Office
PAMS File: 2011-10-011

Permit Number: