

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: 052009-014 Project Number: 2008-11-021

Parent Company: United Suppliers, Incorporated

Parent Company Address: P.O. Box 538, Eldora, IA 50627

Installation Name: St. Joe Terminal, LLC

Installation Address: 203 Florence Road, St. Joseph, MO 64504

Location Information: Buchanan County, S20, T57N, R35W

Application for Authority to Construct was made for:  
 An upgrade to the fertilizer receiving and distribution equipment. 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.

MAY 18 2009

EFFECTIVE DATE

*Steven J. Fisher for JLR*

DIRECTOR OR DESIGNEE  
 DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within 18 months from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within 18 months after the effective date of this permit, or if construction or modification is suspended for one year or more.

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

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(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 within 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 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 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.	2008-11-021

**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."*

St. Joe Terminal, LLC  
Buchanan County, S20, T57N, R35W

1. **Superseding Condition**  
The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 1297-019) from the Air Pollution Control Program.
2. **Emission Limitation**
  - A. St. Joe Terminal, LLC (St. Joe Terminal) shall emit less than 15.0 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from emission units (EU1-EU4) shown in Table 2.
  - B. St. Joe Terminal shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from emission units (EU1-EU4). Attachment A or an equivalent form shall be used for this purpose. St. Joe Terminal 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. St. Joe Terminal 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 2.B. indicate that the source exceeds the limitation of Special Condition Number 2.A.
3. **Haul Road Watering** - St. Joe Terminal shall water haul roads whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2008-11-021  
Installation ID Number: 021-0102  
Permit Number:

St. Joe Terminal, LLC  
203 East Florence Road  
St. Joseph, MO 64504

Complete: November 25, 2008

Parent Company:  
United Suppliers, Incorporated  
P.O. Box 538  
Eldora, IA 50627

Buchanan County, S20, T57N, R35W

REVIEW SUMMARY

- St. Joe Terminal has applied for authority to upgrade 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 (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> are limited to below de minimis levels.
- This installation is located in Buchanan 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 is not required for the source.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

St. Joe Terminal is an existing fertilizer storage facility located in Buchanan County, Missouri. The facility stores urea, potash, di-ammonium phosphate and mono-ammonium phosphate fertilizers. St. Joe Terminal has received one construction permit from the Air Pollution Control Program. Permit number 1297-019 was issued for the construction of a load out hopper, distribution belt conveyors, and five (5) storage bays. Two additional storage bays were constructed in 2001 which did not require a construction permit.

Table 1: Construction Permits

Permit Number	Description
1297-019	dry fertilizer receiving, storage, and distribution center

### PROJECT DESCRIPTION

According to construction permit number 1297-019, the throughput for the source was based on the facility's maximum receiving capacity of 200 tons fertilizer per hour. St. Joe Terminal proposes to upgrade their facility by adding two (2) additional storage bins and replacing their 200 ton per hour receiving conveyor with an 800 ton per hour rail unloading conveyor. The emission units for the entire facility were considered for this project and are summarized in the table below.

Table 2: Project Emissions Units

Point ID	Description	MHDR	Units
EU1	Dry Fertilizer Receiving	800	ton fertilizer / hr
EU2	Dry Fertilizer Distribution	800	ton fertilizer / hr
EU3	Dry Fertilizer Load Out	800	ton fertilizer / hr
EU4	Haul Road	9.09	VMT/hr

## EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the previous project number 021-0102-005. The emission factor used was 0.02 pounds particulate matter per ton fertilizer processed for emission units EU1 – EU3. Potential emissions from the 750 foot haul road were calculated assuming 50% control efficiency for undocumented watering. As this project is limited to the modification of existing equipment, the potential emissions of the application represent the potential of the new equipment assuming continuous operation (8760 hours per year) less the actual emissions from the existing equipment (i.e. potential emissions minus actual emissions). The following table provides an emissions summary for this project.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions <sup>1</sup>	Existing Actual Emissions (2006 and 2007EIQ) <sup>2</sup>	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	64.59	3.175	248.887	<15.0
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
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

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

<sup>1</sup>Existing potential emissions were obtained from permit number 1297-019

<sup>2</sup>Existing actual emissions were obtained from the applicant's 2006 and 2007 Emission Inventory Questionnaire (EIQ).

## 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<sub>10</sub> are conditioned to below de minimis levels.

## APPLICABLE REQUIREMENTS

St. Joe Terminal 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 10-2.070

## 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*, I recommend this permit be granted with special conditions.

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Kathi Jantz  
Environmental Engineer

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Date

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated October 14, 2008, received November 13, 2008, designating United Suppliers, Incorporated as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Kansas City Regional Office Site Survey, dated December 5, 2008.

## Attachment A - PM<sub>10</sub> Compliance Worksheet

St. Joe Terminal, LLC  
 Buchanan County, S20, T57N, R35W  
 Project Number: 2008-11-021  
 Installation ID Number: 021-0102  
 Permit Number: \_\_\_\_\_

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

Month/Year	Emission Units (EU1-EU4)		1 Month Total PM <sub>10</sub> Emissions	Previous Month's 12 Month Total	Previous Year's 1 month Total	12 month Total PM <sub>10</sub> Emissions
C1	C2	C3	C4	C5	C6	C7
	Amount of Fertilizer Processed (tons)	Composite Emission Factor (tons PM <sub>10</sub> per tons fertilizer)	Monthly PM <sub>10</sub> Emissions (tons)	12 month Rolling Total PM <sub>10</sub> Emissions (tons)	Monthly PM <sub>10</sub> Emissions (tons)	12 month Rolling Total PM <sub>10</sub> Emissions (tons)
Example	1000	3.597E-5	0.03597			
		3.597E-5				
		3.597E-5				
		3.597E-5				
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		3.597E-5				
		3.597E-5				
		3.597E-5				

**Instructions:**

- C2 = the total tons of fertilizer received (or processed) during the month and year indicated in C1
- C3 = 3.597E-5, the composite emission factor for emission units (EU1-EU4)
- C4 = C2 × C3
- C5 = the 12 month rolling total PM<sub>10</sub> emissions from the previous month
- C6 = the monthly total PM<sub>10</sub> emissions from the previous year
- C7 = C4 + C5 – C6 **Note: A value less than 15.0 tons is necessary for continued compliance.**

Mr. Terry Gibson  
Terminal Manager  
St. Joe Terminal, LLC  
203 Florence Road  
St. Joseph, MO 64504

RE: New Source Review Permit - Project Number: 2008-11-021

Dear Mr. Gibson:

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 Kathi Jantz, 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

Kendall B. Hale  
New Source Review Unit Chief

KBH:kjl

Enclosures

c: Kansas City Regional Office  
PAMS File: 2008-11-021  
Permit Number: