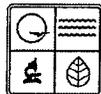


STATE OF MISSOURI

# PERMIT BOOK



## 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: **092007-008** Project Number: 2006-05-030

Parent Company: Premium Standard Farms

Parent Company Address: 805 Pennsylvania Av., Ste. 200, Kansas City, MO 64105

Installation Name: Premium Standard Farms

Installation Address: 22123 Highway 5, Milan, MO 63556

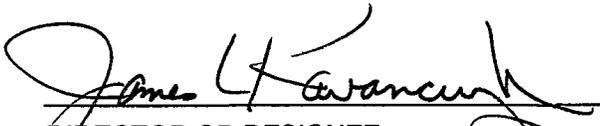
Location Information: Sullivan County, S35, T63N, R20W

Application for Authority to Construct was made for (1) the addition of waste treatment capacity to allow for an increase in plant capacity; and (2) the option for construction of a flare to burn digester waste gas. 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.

SEP 19 2007

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 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 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 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 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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Permit No.	
Project No.	2006-05-030

**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."*

Premium Standard Foods  
Sullivan County, S35, T63N, R20W

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

Project Number: 2006-05-030  
Installation ID Number: 211-0014  
Permit Number:

Premium Standard Farms  
22123 Highway 5  
Milan, MO 63556

Complete: May 17, 2006  
Reviewed: February 6, 2007

Parent Company:  
Premium Standard Farms  
805 Pennsylvania Avenue, Suite 200  
Kansas City, MO 64105  
Sullivan County, S35, T63N, R20W

REVIEW SUMMARY

- Premium Standard Foods has applied for authority to construct (1) additional waste treatment capacity and (2) a flare.
- 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.
- 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.
- A flare may be constructed and operated to control the digester gas emissions from the equipment in this permit, or they may be burned in the existing boilers or vented.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. The potential emission of H<sub>2</sub>S is below the de minimis level of 10.0 tons per year.
- This installation is located in Sullivan 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 the potential emissions of the application are below de minimis levels.

- Emissions testing is not required for the existing boilers, added flare and modified waste treatment system.
- A Basic operating permit is required for this installation.
- Approval of this permit is recommended without special conditions.

### INSTALLATION DESCRIPTION

Premium Standard Farms is a pork processing plant with rendering capabilities in Sullivan County, Missouri, near the city of Milan. The installation provides its own freshwater treatment and animal rendering by providing on-site wastewater treatment facilities for each stream. The plant receives livestock and places them in an indoor holding pen, waiting to be slaughtered. Once slaughtered, the blood, fat and hair from the hide is collected and routed to the rendering plant for processing into animal meal and fat. Part of the hide is sent to rendering and part is shipped off-site. Edible pork products are cut, refrigerated and packaged for shipping. Any animal waste contained in the animal intestines is separated and processed in the wastewater treatment plant.

A Basic Operating Permit (EX1998-05-264) was issued in September 2003, and renewed (AP2002-11-098) in December 2002. The following construction permits have been issued to Premium Standard Foods from the Air Pollution Control Program.

Permit Number	Description
0394-014	Construct and operate pork processing plant with rendering capabilities. Same project number includes an amendment to this permit to account for hydrogen sulfide in the digester gas. Both projects show minor level of NOx emissions and de minimis levels of all other criteria pollutants.
0595-012	Switch alternative fuel source from natural gas to distillate fuel oil and increase boiler usage to allow operation of all three boilers. Construct two new distillate fuel oil storage tanks.

### PROJECT DESCRIPTION

Premium Standard Foods proposes to (1) increase their processing to 10,000 kills per day, which will increase air emissions from the wastewater treatment digester; and (2) the option to construct and operate a flare to control digester emissions from the waste water treatment portion of their pork packing plant. The existing boilers may also be used as an option, or the gases vented to atmosphere. The increase in production is expected to result in an increase in digester gas emissions from 36 standard cubic feet per minute (SCFM) to 49 SCFM. No other emissions changes are expected to result.

## EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 2.4 Municipal Solid Waste Landfills.

Existing actual emissions were taken from the applicant's 2005 Emissions Inventory Questionnaire (EIQ) submittal. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) Based on AP-42, Table 2.4-3, the flare's destruction efficiency of H<sub>2</sub>S can be assumed to be 80%. The worst case for potential emissions, however, was to assume this efficiency to be 100%. The installation conditioned potentials are not applicable because all emissions are below de minimis levels. A Section (5) construction permit is required because the existing potential emissions of this installation are greater than de minimis, thus requiring the existing construction permits, and because the potential emissions of this project include criteria and regulated pollutants that are below de minimis levels. The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions <sup>1</sup>	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	20.67	2.20	0.21	N/A
SO <sub>x</sub>	40.0	11.96	0.19	2.30	N/A
NO <sub>x</sub>	40.0	75.63	23.74	0.84	N/A
VOC	40.0	10.39	4.64	0.00	N/A
CO	100.0	59.49	29.43	7.24	N/A
HAPs	10.0/25.0	N/D	0.48	0.00	N/A
H <sub>2</sub> S	10.0	N/D	0.90 <sup>2</sup>	1.22	N/A

<sup>1</sup>Existing Potential Emissions taken from permit number 0595-012.

<sup>2</sup>Existing Actual Emission of H<sub>2</sub>S calculated for this project based on existing digester gas output.

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 are below de minimis levels.

### APPLICABLE REQUIREMENTS

Premium Standard Farms 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 by April 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 10-3.090*

## SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400*
- *Restriction of Emission of Sulfur Compounds, 10 CSR 10-6.260*

## AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was not performed since the potential emissions of the application are below de minimis levels.

## 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 without special conditions.

\_\_\_\_\_  
Jeannie Kozak  
Environmental Engineer

\_\_\_\_\_  
Date

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated May 8, 2006, received May 10, 2006, designating Premium Standard Foods as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- NERO Regional Office Site Survey, dated May 18, 2006.

Mr. Brian Paulsen  
Environmental Affairs Manager  
Premium Standard Foods  
P.O. Box 194  
Princeton, MO 64673

RE: New Source Review Permit - Project Number: 2006-05-030

Dear Mr. Paulsen:

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 with 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, contact Jeannie Kozak at the department's 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: Northeast Regional Office  
PAMS File 2006-05-030  
Permit Number: