



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: **012008-015** Project Number: 2007-10-030

Parent Company: Schreiber Foods, Inc.

Parent Company Address: P.O. Box 19010, Green Bay, WI 54307-9010

Installation Name: Schreiber Foods, Inc. – Mount Vernon

Installation Address: 108 West North Street, Mount Vernon, MO 65712

Location Information: Lawrence County, S30, T28N, R26W

Application for Authority to Construct was made for:
The modification of two existing boilers to combust alternative fuel. 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.

JAN 29 2008

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "James Kavanagh".

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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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."

Schreiber Foods, Inc. – Mount Vernon
Lawrence County, S30, T28N, R26W

1. Limitation on Hours of Operation
 - A. Schreiber Foods, Inc. shall limit the hours of operation of boiler #1 (EP-01) and boiler #2 (EP-02) to less than 600 hours per 12-month period while combusting #2 fuel oil in the aforementioned boilers.
 - B. Schreiber Foods, Inc. shall record the hours of operation of boiler #1 and boiler #2 while combusting #2 fuel oil. These records shall be maintained for not less than five (5) years and be made available to Department of Natural Resources personnel upon verbal request.
 - C. Schreiber Foods, Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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 Conditions Number 1.A.

2. Limitation on Fuel Oil Sulfur Content
 - A. Schreiber Foods, Inc. shall combust #2 fuel oil in boiler #1 and boiler #2 with a sulfur content of less than or equal to 0.5 percent by weight.
 - B. Schreiber Foods, Inc. shall demonstrate compliance with Special Condition 2.A through one of the following methods:
 - (1) Schreiber Foods, Inc. shall obtain documentation from the fuel supplier indicating the fuel's sulfur content. This documentation shall be obtained once during every 3-month period in which fuel is delivered to the installation.
 - (2) Schreiber Foods, Inc. shall test the fuel oil in accordance with 10 CSR 10-6.040 paragraph (7). Test shall be conducted once during every 3-month period in which fuel is delivered to the installation.
 - C. Schreiber Foods, Inc. shall maintain documentation or test results required by Special Conditions 2.B for not less than five (5) years and make them available to Department of Natural Resources personnel upon verbal request.
 - D. Schreiber Foods, Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the

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SPECIAL CONDITIONS:

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

records from Special Condition Number 2.B indicate that the source exceeds the limitation of Special Conditions Number 2.A.

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

Project Number: 2007-10-030
Installation ID Number: 109-0035
Permit Number:

Schreiber Foods, Inc. – Mount Vernon
108 West North Street
Mount Vernon, MO 65712

Complete: 10/9/2007

Parent Company:
Schreiber Foods, Inc.
P.O. Box 19010
Green Bay, WI 54307-9010

Lawrence County, S30, T28N, R26W

REVIEW SUMMARY

- Schreiber Foods, Inc. – Mount Vernon has applied for authority to combust Renewable Environmental Solutions, LLC (RES) biofuel in boiler #1 and boiler #2.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- Subpart Dc of the New Source Performance Standards (NSPS) applies to boiler #1.
- 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 criteria pollutants are below de minimis levels.
- This installation is located in Lawrence 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 below de minimis levels.

- Emissions testing is not required for the equipment.
- A Basic Operating Permit Amendment application is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended without special conditions.

INSTALLATION DESCRIPTION

Schreiber Foods, Inc. – Mount Vernon manufactures cheese in Mount Vernon, Missouri. They are a minor source of sulfur oxides (SO_x) and hold a basic operating permit.

No new source review permits have been issued to Schreiber Foods, Inc. -- Mount Vernon from the Air Pollution Control Program.

PROJECT DESCRIPTION

Schreiber Foods, Inc. – Mount Vernon has applied for authority to modify their two boilers to combust RES biofuel. The boiler #1 (EP-01) and boiler #2 (EP-02) are rated at 14.7 million British thermal units per hour (MMBtu/hr) and 6.3 MMBtu/hr, respectively. These boilers are also capable of combusting natural gas and #2 fuel oil.

The installation has limits in their operating permit limiting the hours that the boilers may combust #2 fuel oil and limiting the fuel oils sulfur content. These limits have been restated in this permit.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from an emissions test conducted by AirSource Technologies, Inc. at Schreiber Foods, Inc. in Monett, Missouri. Emission factors were developed for particulate matter (filterable and condensable), volatile organic compounds (VOCs), nitrogen oxides (NO_x), carbon monoxide (CO) and sulfur dioxide (SO₂) using the “worst-case” run for each pollutant. A laboratory report was also submitted with the application. This report lists the heat of combustion (Btu/gal) as less than the Btu/gal in the emissions test. The emission factors were adjusted to account for this discrepancy. Schreiber Foods, Inc. submitted a material safety data sheet (MSDS) for the biofuel. The MSDS lists no hazardous air pollutants (HAPs) in the composition/information section. Existing Potential Emissions were recalculated using emission factors found in the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, section 1.3 *Fuel Oil Combustion*, September 1998 and section 1.4 *Natural Gas Combustion*, July 1998. These emissions represent the worst case emissions for each pollutant based on 8760 hours. Potential emissions of the application represent the potential of combusting RES biofuel in the existing boilers, assuming continuous operation (8760 hours per year). The following table provides an emissions summary

for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Installation Potential Emissions	Existing Actual Emissions (2006 EIQ)	Potential Emissions of the Application	*New Installation Potential Emissions
PM ₁₀	15.0	0.68	0.16	9.66	9.66
SO _x	40.0	47.30	0.01	20.14	20.14
NO _x	40.0	13.14	2.17	23.73	23.73
VOC	40.0	0.50	0.45	0.09	0.50
CO	100.0	7.57	1.82	18.49	18.49
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

* Based upon worst case scenario of 8760 hours of operation of natural gas, RES fuel, or 600 hours of #2 fuel oil

Using the emission test submitted by Schreiber Foods, Inc., the SO_x emissions were calculated to be well below their de minimis limit. No sulfur content testing of the new fuel will be required because the sulfur content can vary greatly without exceeding the de minimis levels.

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 criteria pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Schreiber Foods, Inc. -- Mount Vernon 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 April 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065

- *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

- *New Source Performance Regulations*, 10 CSR 10-6.070 – *New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc.
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
- *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*, 10 CSR 10-3.060

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.

Michael Mittermeyer
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 9/26/2007, received 10/9/2007, designating Schreiber Foods, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Emissions Test Report, AirSource Technologies, Inc.

Mr. Rod Poziwilko
Maintenance Team Leader
Schreiber Foods, Inc. -- Mount Vernon
108 West North Street
Mount Vernon, MO 65712

RE: New Source Review Permit - Project Number: 2007-10-030

Dear Mr. Poziwilko:

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, your new source review permit application and with your amended operating permit 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 Michael Mittermeyer at the departments' 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:mml

Enclosures

c: Southwest Regional Office
PAMS File 2007-10-030