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: 092007-00 Project Number: 2007-01-080
Parent Company: Sara Lee Foods, U.S.
Parent Company Address: 3500 Lacey Road, Downers Grove, IL 60512-5424
Installation Name: Sara Lee Foods, St. Joseph Facility
Installation Address: 5807 Mitchell Avenue, St. Joseph, MO 64507
Location Information: Buchanan County, S18, 57N, 34W

Application for Authority to Construct was made for:
Installation of two demand water heaters. This equipment was constructed prior to receipt of a permit from the Air Pollution Control Program. Obtaining this permit is part of a remedial action required by the Air Pollution Control Program. 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 17 2007
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 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 devises 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 sources(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 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.”

Sara Lee Foods, St. Joseph Facility
Buchanan County, S18, 57N, 34W

1. Sara Lee Foods, St. Joseph Facility shall not install and operate Batch Houses 9 and 10 without obtaining a construction permit from the Air Pollution Control Program.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2007-01-080
Installation ID Number: 021-0109
Permit Number:

Sara Lee Foods, St. Joseph Facility Complete: March 29, 2007
5807 Mitchell Avenue
St. Joseph, MO 64507

Parent Company:
Sara Lee Foods, U.S.
3500 Lacey Road
Downers Grove, IL 60512-5424

Buchanan County, S18, 57N, 34W

REVIEW SUMMARY

• Sara Lee Foods, St. Joseph Facility has applied for authority to install two demand water heaters.

• Insignificant amounts of hazardous air pollutant (HAP) emissions are 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.

• 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 all criteria pollutants are at 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 below de minimis levels.
• Emissions testing is not required for the equipment/source.

• A revision to Basic Operating Permit application is required for this installation within 30 days of equipment startup.

• Approval of this permit is recommended with a special condition.

INSTALLATION DESCRIPTION

Sara Lee Foods, St. Joseph Facility (Sara Lee) is an existing installation located in Buchanan County, Missouri that prepares a variety of processed meats. Some of these processed meats are smoked. The installation currently has nine batch smoked meat houses, three liquid continuous smokehouses, one natural continuous smokehouse, four natural gas fired boilers, a thermal oil heater, a water heater, and two emergency generators.

The plant is considered a minor source under construction permits. Sara Lee was issued a basic operating permit on September 26, 2001. A review of Sara Lee’s basic state operating permit renewal (Project No. 2005-08-027) was completed on August 25, 2005. The following construction permits have been issued to Sara Lee from the Air Pollution Control Program.

Table 1: Previously Issued Construction Permits

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>012000-009</td>
<td>New meat processing installation</td>
</tr>
<tr>
<td>072001-010</td>
<td>New smokehouses</td>
</tr>
<tr>
<td>072001-010A</td>
<td>Amendment to Permit No. 072001-010 for additional smokehouses</td>
</tr>
<tr>
<td>092004-010</td>
<td>New 12.1 MMBtu/hr dual-fueled boiler, a 6.0 MMBtu/hr dual-fueled boiler, a 10.0 MMBtu/hr dual-fueled boiler, and a continuous liquid smokehouse.</td>
</tr>
<tr>
<td>092006-010</td>
<td>Addition of liquid smoke capability to oven CS3.</td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

Sara Lee submitted a construction permit application for the two demand water heaters currently in operation. These water heaters were installed in 2000 but were mistakenly left out of the list of emission sources in the application submitted in 1999. These water heaters are rated at 12 Million Btu per hour each and are capable of burning both natural gas and propane.

Sara Lee also proposed to correct the existing potential emission of the installation based on the equipment permitted previously but never installed (Batch House 9 & 10) and the emission test data of oven CS4 (Permit Number 092004-010).
EMISSIONS/CONTROLS EVALUATION

Particulate matter with diameter of less than ten (10) microns (PM$_{10}$), sulfur oxide (SO$_x$), nitrogen oxide (NO$_x$), Volatile Organic Compounds (VOC), carbon monoxide (CO), and HAPs will be emitted from the usage of natural gas and propane for the water heaters. No control device is used for this project. The emission factors used in this analysis are obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 1.4, *Natural Gas Combustion* (3/98), and Section 1.5, *Liquefied Petroleum Gas Combustion* (10/96). By subtracting the emissions from the Batch Houses (9&10) and updating emissions from CS4 by using new emission factors, existing potential emissions are recalculated. Existing potential emissions also include the two water heaters in this project. Existing actual emissions are taken from the 2005 Emission Inventory Questionnaire (EIQ). Potential emissions of the application represent the potential of the new equipment (water heaters), assuming continuous operation (8760 hours per year) and worst case scenario. The following table provides an emissions summary for this project.

<table>
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<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>46.65</td>
<td>10.89</td>
<td>0.80</td>
<td>N/A</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>0.56</td>
<td>0.1</td>
<td>0.50</td>
<td>N/A</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>63.63</td>
<td>12.61</td>
<td>10.51</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>71.95</td>
<td>19.67</td>
<td>0.58</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>49.86</td>
<td>14.25</td>
<td>8.83</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>6.69</td>
<td>N/D</td>
<td>0.20</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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 all criteria pollutants are at de minimis levels.

APPLICABLE REQUIREMENTS

Sara Lee Foods, St. Joseph Facility 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

- 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 with a special condition.

Fuad Wadud
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- Kansas City Regional Office Site Survey, dated April 26, 2007.
Mr. Brent Bliss  
General Manager  
Sara Lee Foods  
5807 Mitchell Avenue  
St. Joseph, MO 64507  

RE: New Source Review Permit - Project Number: 2007-01-080  

Dear Mr. Bliss:  

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 Fuad Wadud at the Department of Natural Resources’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone 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: fwl  

Enclosures  

c: Kansas City Regional Office  
PAMS File 2007-01-080  

Permit Number: