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: 042007-002  Project Number: 2007-01-003

Parent Company: SSM Health Care

Parent Company Address: 1173 Corporate Lake Drive, St. Louis, MO 63132

Installation Name: St. Joseph Hospital West

Installation Address: 100 Medical Plaza, Lake St. Louis, MO 63367

Location Information: St. Charles County, S47, T27N, R2E

Application for Authority to Construct was made for:
The installation of two (2) 10.25 MMBtu/hr boilers. This operation was constructed prior to receipt of a New Source Review permit from the Air Pollution Control Program (APCP). Obtaining this permit is part of a remedial action required by the APCP. 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.

APR - 6 2007  DIRECTOR OR DESIGNEE
EFFECTIVE DATE
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 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.
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: 2007-01-003
Project Number: 2007-01-003

Parent Company: SSM Health Care
Parent Company Address: 1173 Corporate Lake Drive, St. Louis, MO 63132

Installation Name: St. Joseph Hospital West
Installation Address: 100 Medical Plaza, Lake St. Louis, MO 63367

Location Information: St. Charles County, S47, T27N, R2E

Application for Authority to Construct was made for:
The installation of two (2) 10.25 MMBtu/hr boilers. This operation was constructed prior to receipt of a New Source Review permit from the Air Pollution Control Program (APCP). Obtaining this permit is part of a remedial action required by the APCP. 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.
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 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.”

St. Joseph Hospital West
St. Charles County, S47, T27N, R2E

1. Emission Limitation
   A. St. Joseph Hospital West shall emit less than 40 tons of sulfur oxides (SO\textsubscript{2}) in any consecutive 12 month period from the two 10.25 MMBtu/hr boilers (EP-3).

   B. St. Joseph Hospital West shall maintain an accurate record of SO\textsubscript{2} emitted into the atmosphere from the two 10.25 MMBtu/hr boilers (EP-3). Attachment A or an equivalent form shall be used for this purpose. St. Joseph Hospital West 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. Joseph Hospital West 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 Condition Number 1.A.

2. Fuel Limitation
   A. St. Joseph Hospital West shall combust only Natural Gas or #2 Fuel Oil in the two boilers (EP-3).

   B. The sulfur content of #2 Fuel Oil shall not exceed one half (0.5) percent by weight.

   C. To show compliance with Special Condition Number 2.B, St. Joseph Hospital West shall obtain, for each fuel oil delivery, from the fuel vendors or conduct their own fuel analysis to evaluate the typical sulfur content weight percent for the fuel.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2007-01-003
Installation ID Number: 183-0103

St. Joseph Hospital West
100 Medical Plaza
Lake St. Louis, MO 63367

Parent Company:
SSM Health Care
1173 Corporate Lake Drive
St. Louis, MO 63132

St. Charles County, S47, T27N, R2E

REVIEW SUMMARY

- St. Joseph Hospital West has applied for authority to install two (2) 10.25 MMBtu/hr boilers.

- Hazardous Air Pollutant (HAP) emissions are expected from the combustion of fuel but in insignificant quantities.

- Subpart Dc of the New Source Performance Standards (NSPS) applies 10.25 MMBtu/hr boilers.

- 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 sulfur oxides (SOx) are conditioned below de minimis levels.

- This installation is located in St. Charles County, a nonattainment area for ozone (O3) and an attainment area for all other 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 is required for this installation.

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

St. Joseph Hospital West is a health care provider located in Lake St. Louis. The installation is a minor source and holds a construction permit for two (2) boilers.

The following permits have been issued to St. Joseph Hospital West from the Air Pollution Control Program.

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0386-004</td>
<td>Incinerator</td>
</tr>
<tr>
<td>0199-012</td>
<td>2 boilers</td>
</tr>
</tbody>
</table>

The incinerator authorized by permit 0386-004 has been removed, but the associated exhaust stack is still in place.

In January 2007 St. Joseph Hospital West was issued Notice of Violation No. 3453 for constructing two (2) boilers, an emergency generator, and a 20,000 gallon petroleum underground storage tank. The equipment authorized by permit 0199-012 was also installed without obtaining a construction permit.

PROJECT DESCRIPTION

St. Joseph Hospital West installed two (2) new 10.25 MMBtu/hr boilers, 20,000 gallon petroleum underground storage tank and one emergency generator. The two boilers will typically fire natural gas, but #2 fuel oil will be stored for firing in the boilers in case of emergency. The emergency generator is exempt from construction permit requirements if operated in accordance with 10 CSR 10-6.061 section (3) paragraph (A)2.BB.

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 1.3, Fuel Oil Combustion, and section 1.4, Natural Gas Combustion. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>4.64</td>
<td>0.52</td>
<td>0.69</td>
<td>N/A</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>40</td>
<td>0.03</td>
<td>45.98</td>
<td>&lt;40</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>15.76</td>
<td>0.11</td>
<td>7.66</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>0.26</td>
<td>0.76</td>
<td>0.47</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>3.92</td>
<td>0.03</td>
<td>7.15</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/D</td>
<td>N/D</td>
<td>0.16</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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

Potential emissions represent the worst case emissions from either #2 fuel oil or natural gas for each criteria pollutant. PM$_{10}$, SO$_x$ and NO$_x$ emissions are greater when #2 fuel oil is used and CO, VOC and HAPs emissions are greater when natural gas is used.

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 SO$_x$ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

St. Joseph Hospital West 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 Particulate Matter From Industrial Processes, 10 CSR 10-6.400
- Restriction of Emission of Sulfur Compounds, 10 CSR 10-6.260

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.

Michael Mittermeyer
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 5, 2007, received January 8, 2007, designating SSM Health Care as the owner and operator of the installation.
### Attachment A - SO\textsubscript{X} Compliance Worksheet

St. Joseph Hospital West  
St. Charles County, S47, T27N, R2E  
Project Number: 2007-01-003  
Installation ID Number: 183-0103  
Permit Number: _________

This sheet covers the period from \underline{________} to \underline{________}.

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Fuel Oil Consumption (gal)</th>
<th>Fuel Oil SO\textsubscript{X} Emission Factor (lbs/gal)</th>
<th>\textsuperscript{1}Monthly SO\textsubscript{X} from Fuel Oil Emissions (lbs)</th>
<th>Monthly Natural Gas Consumption (MMCF)</th>
<th>Natural Gas SO\textsubscript{X} Emission Factor (lbs/MMCF)</th>
<th>\textsuperscript{1}Monthly SO\textsubscript{X} from Natural Gas Emissions (lbs)</th>
<th>\textsuperscript{2}Monthly SO\textsubscript{X} Emissions (tons)</th>
<th>\textsuperscript{3}12-Month SO\textsubscript{X} Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{Example}</td>
<td>0.072</td>
<td>44,000</td>
<td>0.60</td>
<td>1328.8</td>
<td>0.66</td>
<td>9.08</td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>0.072</td>
<td></td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td>0.072</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Note 1: The Monthly Emissions from Fuel Oil and Natural Gas (lbs) are calculated by multiplying the respective Monthly Production by the corresponding Composite Emission Factor (lbs/unit).

Note 2: The Monthly Emissions (tons) are calculated by adding the Monthly Emissions from Fuel Oil and the Monthly Emissions from Natural Gas (lbs) and dividing the sum by 2,000.

Note 3: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11) months. A total of less than 40 tons in any consecutive 12-month period indicates compliance.
Mr. Michael Schnaare  
Principal  
St. Joseph Hospital West  
100 Medical Plaza  
Lake St. Louis, MO 63367  

RE: New Source Review Permit - Project Number: 2007-01-003  

Dear Mr. Schnaare:  

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 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 me at (573) 751-4817, or you may write to me at the Department of Natural Resources’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.  

Sincerely,  

AIR POLLUTION CONTROL PROGRAM  

Kendall B. Hale  
New Source Review Unit Chief  

KBH:mml  

Enclosures  

c: St. Louis Regional Office  
PAMS File 2007-01-003  
Permit Number: