STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

February 13, 2006

Certified Mail No. 7005 1160 0000 1550 1129

Mr. Roger Dean
Director Building Services
Saint Luke's Meridian Medical Center
520 S. Eagle Rd
Meridian, ID 83642-6351

RE: Facility ID No. 001-00182, Saint Luke's Meridian Medical Center, Meridian
Final Permit Letter

Dear Mr. Dean:

The Idaho Department of Environmental Quality (DEQ) is issuing a modified Permit to Construct (PTC) Number P-050041 to Saint Luke's Meridian Medical Center (SLMMC) located in Meridian, in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received on August 10, 2005. This permit is effective immediately and replaces PTC No. 001-00182, issued on November 21, 2001, the terms and conditions of which no longer apply. This permit does not release SLMMC from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

A representative of the Boise Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Martin Bauer, Administrator
Air Quality Division

MB/HE/bf Permit No. P-050041

Enclosures

Air Quality **PERMIT TO CONSTRUCT** **State of Idaho** **Department of Environmental Quality**	**PERMIT No.:** P-050041 **FACILITY ID No.:** 001-00182 **AQCR:** 064 **CLASS:** SM **SIC:** 8062 **ZONE:** 11 **UTM COORDINATE (km):** 581.1, 4,762.2

1. **PERMITTEE** St. Luke's Meridian Medical Center			
2. **PROJECT** Permit to Construct Modification			
3. **MAILING ADDRESS** 520 S. Eagle Rd	**CITY** Meridian	**STATE** Idaho	**ZIP** 83642-6351
4. **FACILITY CONTACT** Roger Dean	**TITLE** Director Building Services	**TELEPHONE** (208) 381-2222 ext. 2255	
5. **RESPONSIBLE OFFICIAL** Roger Dean	**TITLE** Director Building Services	**TELEPHONE** (208) 381-2222 ext. 2255	
6. **EXACT PLANT LOCATION** 520 S. Eagle Rd		**COUNTY** Ada	
7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS** General Medical and Surgical Hospital			

8. **GENERAL CONDITIONS**

This permit is issued according to IDAPA 58.01.01.200, *Rules for the Control of Air Pollution in Idaho*, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the *Rules for the Control of Air Pollution in Idaho,* IDAPA 58.01.01.200, et seq.

TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: **February 13, 2006**

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Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Idaho Department of Environmental Quality
EPA	Environmental Protection Agency
gr/dscf	grains per dry standard cubic foot
gpm	gallons per minute
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
kW	kilowatts
lb/hr	pound per hour
MMBtu	million British thermal units
NO_x	oxides of nitrogen
NSPS	New Source Performance Standards
O&M	operations and maintenance
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
SLMMC	St. Luke's Meridian Medical Center
SCC	Source Classification Code
scf	standard cubic feet
SIC	Standard Industrial Classification
SO_2	sulfur dioxide
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	Volatile organic compounds

1. PERMIT TO CONSTRUCT SCOPE

Purpose

1.1 The purpose of this permit to construct (PTC) is to modify the facility's existing PTC. Specifically, this modified permit allows the facility to combust 0.5% by weight fuel oil in its two boilers and two generators. Prior to this modification, the fuel oil sulfur content was limited to 0.05% by weight.

1.2 This modified PTC replaces the following permits, the terms and conditions of which no longer apply:

- Permit to Construct No. 001-00182, issued on November 21, 2001.
- Permit to Construct No. 001-00182, issued on September 24, 2001.

Regulated Sources

Table 1.1 lists all sources of emissions that are regulated in this PTC.

Table 1.1 REGULATED EMISSIONS SOURCES

Permit Sections	Source Description	Emissions Control(s)
2	Boilers Nos. 1 and 2 Natural gas fired, ASTM Grade 2 fuel oil backup Boiler No. 1 Manufacturer: Hurst Rated steam rate (pounds/hr): 12,075 Manufacturer's Serial No.: S1750-150-15 Model No.: S4-GA2-350-150 Burner Type: Industrial Combustion Burner No. AM-913-165 Fuel flow gas (maximum MMBtu/hr): 11.7 ASTM Grade 2 fuel oil flow; maximum/minimum (gallons per hour): 105/21.5 Boiler No. 2 Manufacturer: Hurst Rated steam rate (pounds/hr): 12,075 Manufacturer's Serial No.: S1750-150-16 Model No.: S4-GA2-350-150 Burner Type: Industrial Combustion Burner No. AM-913-166 Fuel flow gas (maximum MMBtu/hr): 11.7 ASTM Grade 2 fuel oil flow; maximum/minimum (gallons per hour): 105/21.5 The stack for each boiler has the following parameters: Height (ft): 20 Diameter (ft): 1.7 Flow rate (acfm): 5,085 Exit temperature (°F): 450	None

3	Emergency Generators Nos. 1 and 2 ASTM Grade 2 fuel oil Generator No. 1 Manufacturer: Caterpillar Rated output capacity (kW): 1,750 Model No.: SR4B Serial No.: 7GM00824 The stack for generator No. 1 has the following parameters: Height (ft): 20 Diameter (ft): 1 Flow rate (acfm): 13,582 Exit temperature (°F): 927 Generator No.2 Manufacturer: Detroit Diesel Rated output capacity (kW): 918 Model No.: R163-7K08 Serial No.: Not available The stack for generator No. 2 has the following parameters: Height (ft): 59 Diameter (ft): 1 Flow rate (acfm): 8,490 Exit temperature (°F): 799	None

2. BOILERS NOS. 1 AND 2

2.1 Process Description

There are two identical Hurst boilers existing at SLMMC. Each boiler is rated at the same heat input capacity – 11.7 MMBtu/hr. The stack parameters are the same for each boiler. Each boiler may operate using either natural gas fuel or ASTM Grade 2 fuel oil. The primary purpose of the boilers is to generate steam for space heating at the hospital.

Boilers Nos. 1 and 2 are subject to New Source Performance Standard (NSPS), Subpart Dc.

2.2 Emissions Control Description

Emissions from the boilers are uncontrolled.

Emissions Limits

2.3 Emissions Limits

The emissions of particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM_{10}), carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur oxides (SO_2), from the boilers' stacks shall not exceed any corresponding emissions rate limits listed in Table 2.1.

Table 2.1 EMISSIONS LIMITS FOR THE BOILERS

Source	PM_{10}*		CO*		NO_x*		SO_2	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Boilers Nos. 1 and 2**	0.35	0.67	0.96	4.2	2.10	6.00	8.25	8.68

* Emissions rates for the PM_{10}, CO, and NO_x are from the PTC No. 001-00182, issued on November 21, 2001.

** Emissions are from one boiler. Only one boiler shall operate at any time while combusting ASTM Grade 2 fuel oil.

2.4 Visible Emissions Limit

The permittee shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.5 Fuel-Burning Equipment

The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume for gas or 0.05 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid fuel.

Operating Requirements

2.6 Allowable Fuel Types for Boilers Nos. 1 and 2

The primary fuel for Boilers Nos. 1 and 2 shall be natural gas. The secondary fuel shall be American Society for Testing and Material (ASTM) Grade 2 fuel oil.

2.7 Boiler Operation

Only one boiler shall operate at any time while combusting ASTM Grade 2 fuel oil.

2.8 Natural Gas to be Combusted During Generator Operation

The permittee shall only combust natural gas in Boilers Nos. 1 and 2 when the generators are operating. In the case of an excess emission event due to noncompliance with this condition, the permittee shall comply with IDAPA 58.01.01.130-136, "Excess Emissions," with specific attention to IDAPA 58.01.01.134, "Upset, Breakdown, and Safety Requirements."

2.9 Natural Gas Fuel Throughput Limit

The maximum amount of natural gas combusted in Boilers Nos. 1 and 2 shall not exceed 273,792 standard cubic feet (scf) per day and 99.9×10^6 scf per any consecutive 12-month period.

2.10 ASTM Grade 2 Fuel Oil Throughput Limit

The maximum amount of ASTM Grade 2 fuel oil combusted in Boilers Nos. 1 and 2 shall not exceed 105 gallons per hour and 220,500 gallons per any consecutive 12-month period.

2.11 Hours of Operation Limits

The maximum daily hours of operations of Boilers Nos. 1 and 2 in aggregate shall not exceed 24 hours per day.

2.12 ASTM Grade 2 Fuel Oil Limit Sulfur Content

No ASTM Grade 2 fuel oil containing sulfur in excess of 0.5% sulfur by weight shall be burned in Boilers Nos. 1 and 2.

Monitoring and Recordkeeping Requirements

2.13 Monitoring Natural Gas Fuel Combusted in the Boilers

- The permittee shall monitor and maintain records of the amount of natural gas combusted in Boilers Nos. 1 and 2 during each day, in accordance with 40 CFR 60.48c (g) unless otherwise approved by EPA.
- The permittee shall monitor and maintain records of the total natural gas consumption of Boilers Nos. 1 and 2 in scf per any consecutive 12-month period.

A compilation of the most recent two years of records shall remain on site and shall be made available to DEQ representatives upon request.

2.14 ASTM Grade 2 Fuel Oil Consumption

The permittee shall monitor and record the date, time, and consumption of ASTM Grade 2 fuel oil for Boilers Nos. 1 and 2 in gallons per hour and gallons per any consecutive 12-month period. A compilation of the most recent two years of records shall remain on site and shall be made available to DEQ representatives upon request.

2.15 Hours of OperationWhen Combusting ASTM Grade 2 Fuel Oil

The permittee shall monitor and record the hours of operation of Boilers Nos. 1 and 2 in hours per day (hrs/day) and hours per any consecutive 12-month period (hrs/yr). A compilation of the most recent two years of records shall remain on site and shall be made available to DEQ representatives upon request.

2.16 New Source Performance Standards

The permittee shall operate Boilers Nos. 1 and 2 in accordance with the applicable sections in 40 CFR Part 60.40c.

2.17 Monitoring Sulfur Content in ASTM Grade 2 Fuel Oil

The permittee shall maintain purchase records, or equivalent, from the manufacturer or distributor that shows the sulfur content of the ASTM Grade 2 fuel oil delivered to the facility on as-received basis. A compilation of the most recent two years of records shall remain on site and shall be made available to DEQ representatives upon request.

2.18 Excess Emissions

The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions from the boilers and the generators due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

Reporting Requirements

2.19 Notification of NSPS Applicability

All notifications concerning NSPS requirements shall be made to U.S. Environmental Protection Agency (EPA) and to DEQ in accordance with 40 CFR 60.7.

Records of this information shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

2.20 NSPS Reporting Requirements

In accordance with 40 CFR 60.48c, the permittee shall submit to DEQ and to EPA a semi-annual report that shall be postmarked by the 30th day following the end of the reporting period. The report shall include records of fuel supplier certification containing 1) the name of the oil supplier, and 2) a statement from the oil supplier that the oil compiles with the specifications under the definition of distillate oil in 40 CFR 60.41c. The report shall include a statement, signed by the permittee, that the records of fuel supplier certifications submitted represent all the fuel oil combusted during the period.

2.21 Reports and Certifications

All periodic reports and certification required by this permit shall be submitted to DEQ within 30 days of the end of each specified reporting period unless otherwise specified in this permit. Excess emissions reports and notification shall be submitted in accordance with IDAPA 58.01.01.130-136. Any reporting required by this permit shall be submitted to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, ID 83706-2239

3. EMERGENCY GENERATORS NOS. 1 AND 2

3.1 Process Description

There are two diesel-fired emergency generators existing at SLMMC. The generators' model numbers, rated output capacities, and serial numbers are shown in Table 1.1 of this permit. The primary purpose of the emergency generators is to provide electrical power to the hospital in the event of a power interruption.

3.2 Emissions Control Description

Emissions from the emergency generators are uncontrolled.

Emissions Limits

3.3 Emissions Limits

Emissions of particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM_{10}), carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur oxides (SO_2) from each emergency generator shall not exceed any corresponding emissions rate limits listed in Table 3.1.

Table 3.1 EMISSIONS LIMITS FOR THE GENERATORS

Source	PM_{10}*			CO*			NO_x*		SO_2	
	lb/hr	lb/24-hr	T/yr	lb/hr	lb/8-hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Emergency generator No. 1	0.99	3.96	0.25	8.38	19.35	3.23	30.49	7.62	5.68	2.19
Emergency generator No. 2	0.53	NA	0.13	6.77	NA	1.69	16.01	4.00	4.98	1.16

* Emissions rates for the PM_{10}, CO, and NO_x are from the PTC No. 001-00182, issued on November 21, 2001.

3.4 Visible Emissions Limit

A person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

3.5 Emergency Generator No. 1, ASTM Grade 2 Fuel Oil Throughput Limit

- The maximum ASTM Grade 2 fuel oil throughput shall not exceed 79.8 gallons per any 60-minute period.
- The maximum ASTM Grade 2 fuel oil throughput shall not exceed 184.3 gallons per any consecutive 8-hour period.
- The maximum ASTM Grade 2 fuel oil throughput shall not exceed 491.6 gallons per any consecutive 24-hour period.
- The maximum ASTM Grade 2 fuel oil throughput shall not exceed 61,450 gallons per any consecutive 12-month period.

The fuel oil throughput limits shall not apply during times of electric power outages to the hospital.

3.6 Emergency Generator No. 2, ASTM Grade 2 Fuel Oil Throughput Limit

- The maximum ASTM Grade 2 fuel oil throughput shall not exceed 265 gallons per any consecutive 24-hour period.

- The maximum ASTM Grade 2 fuel oil throughput shall not exceed 32,550 gallons per any consecutive 12-month period.

The fuel oil throughput limits shall not apply during times of electric power outages to the hospital

3.7 ASTM Grade 2 Fuel Oil Limit Sulfur Content

No ASTM Grade 2 fuel oil containing sulfur in excess of 0.5% sulfur by weight shall be burned in emergency generators Nos. 1 and 2.

Monitoring and Recordkeeping Requirements

3.8 ASTM Grade 2 Fuel Oil Monitoring for Emergency Generators Nos. 1 and 2

- The permittee shall monitor and record the calendar date, gallons per hour, gallons per any consecutive 8-hour period, gallons per any consecutive 24-hour period, and gallons per any consecutive 12-month period for emergency generator No. 1.

- The permittee shall monitor and record the calendar date, gallons per any consecutive 24-hour period, and gallons per any consecutive 12-month period for emergency generator No. 2.

A compilation of the most recent two years of records shall remain on site and shall be made available to DEQ representatives upon request.

Reporting Requirements

3.9 Reports and Certifications

All periodic reports and certification required by this permit shall be submitted to DEQ within 30 days of the end of each specified reporting period unless otherwise specified in this permit. Excess emissions reports and notification shall be submitted in accordance with IDAPA 58.01.01.130-136. Any reporting required by this permit shall be submitted to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, ID 83706-2239

4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the *Rules for the Control of Air Pollution in Idaho*. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:

   - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
   - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.

4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.

5. The permittee shall notify DEQ, in writing, of the required information for the following events within 5 working days after occurrence:

   - Initiation of Construction - Date
   - Completion/Cessation of Construction - Date
   - Actual Production Startup - Date
   - Initial Date of Achieving Maximum Production Rate - Production Rate and Date

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

   All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

9. All reasonable precautions shall be taken to prevent particulate matter (PM) from becoming airborne in accordance with IDAPA 58.01.01.650-651.