



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

June 8, 2007

Certified Mail No. 7005 1160 0000 1550 9347

Mr. Ken Currier
Plant Operations Manager
St. Luke's Regional Medical Center
140 E. Jefferson Street
Boise, ID 83712

RE: Facility ID No. 001-00029, St. Luke's Regional Medical Center, Boise
Final Permit Letter

Dear Mr. Currier:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2007.0048 to St. Luke's Regional Medical Center, 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 March 30, 2007. This permit is effective immediately and replaces Tier II Operating Permit No. T2-040014 issued July 6, 2005, and PTC No. 030063, issued on March 26, 2004, the terms and conditions of which no longer apply. This permit does not release St. Luke's Regional Medical Center from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Since this project does not significantly change the terms of your permit, DEQ will not contact you regarding a meeting to discuss the terms of the permit. However, if you wish to meet to discuss the permit terms and requirements, you may contact Leonard Herr of the Boise Regional Office to schedule a meeting. If a meeting is scheduled, 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 contact Jonathan Pettit at (208) 373-0443 or Jonathan.Pettit@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS/JP/slm

Project No. P-2007.0048

Enclosures

c: Leonard Herr, Boise Regional Office
Bill Rogers, Permit Coordinator
Jonathan Pettit, Permit Writer
Marilyn Seymore/ Pat Rayne, Air Quality Division
Laurie Kral, US EPA Region 10
Permit Binder
Source File
Phyllis Heitman (Ltr Only)
Reading File (Ltr Only)

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1. PERMIT TO CONSTRUCT SCOPE.....	4
2. BOILERS	6
2. ELECTRIC GENERATORS.....	10
3. PERMIT TO CONSTRUCT GENERAL PROVISIONS	12

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

Acronyms, Units, and Chemical Nomenclature

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	U.S. Environmental Protection Agency
gr/dscf	grains per dry standard cubic foot
hr/yr	hours per year
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with Idaho Administrative Procedures Act
km	kilometer
kW	kilowatts
lb/hr	pounds per hour
MMBtu/hr	million British thermal units per hour
MMft ³ /yr	million cubic feet per year
NO _x	oxides of nitrogen
NSPS	New Source Performance Standards
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter of 10 micrometers or less
PTC	Permit to Construct
SIC	Standard Industrial Classification
SM	synthetic minor
SO ₂	sulfur dioxide
T/yr	tons per any consecutive 12-month period
UTM	Universal Transverse Mercator
VOC	volatile organic compound

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: P-2007.0048

Permittee: St. Luke's Regional Medical Center

Location: Boise, Idaho

Facility ID No. 001-00029

1. PERMIT SCOPE

Purpose

- 1.1 This Permit to Construct (PTC) is the renewal and replacement of the facility's Tier II Operating Permit and PTC and increases the short-term operating limit of the emergency generators.
- 1.2 This PTC replaces the following permits, the term and conditions of which shall no longer apply:
- Tier II Operating Permit No. T2-040014, issued July 6, 2005.
 - Permit to Construct No. P-030063, issued March 26, 2004.
 - Tier II Operating Permit No. 001-00029, issued April 22, 2002.
 - Tier II Operating Permit No. 001-00029, issued August 15, 1996.
 - Permit to Construct No. 001-00029, issued July 28, 1993 and re-issued June 20, 1994.

Regulated Sources

- 1.3 Table 1.1 lists all sources of regulated emissions in this permit.

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Controls
2	<p><u>Boiler No. 1</u> – Cleaver Brooks Natural gas-fired, ASTM Grade 2 fuel oil backup 29.29 MMBtu/hr rated heat input capacity Model:CB200-700, Serial No.: L-61585</p>	None
	<p><u>Boiler No. 2</u> – Cleaver Brooks Natural gas-fired, ASTM Grade 2 fuel oil backup 29.29 MMBtu/hr rated heat input capacity Model:CB200-700, Serial No.: L-61406</p>	
	<p><u>Boiler No. 3</u> – Cleaver Brooks Natural gas-fired, ASTM Grade 2 fuel oil backup 29.29 MMBtu/hr rated heat input capacity Model:CB200-700, Serial No.: L-89707</p>	
	<p><u>Boiler No. 4</u> – Cleaver Brooks Natural gas-fired, ASTM Grade 2 fuel oil backup 29.29 MMBtu/hr rated heat input capacity Model:CB200-700, Serial No.: L-89708</p>	
3	<p><u>Emergency Generator No. 1</u> – Caterpillar ASTM Grade 2 fuel oil-fired 900 kW rated output capacity Model: D399, Serial No.: 35B1379</p>	None
	<p><u>Emergency Generator No. 2</u> – Caterpillar ASTM Grade 2 fuel oil-fired 1050 kW rated output capacity Model: 3512, Serial No.: 24Z1313</p>	
	<p><u>Emergency Generator No. 3</u> – Caterpillar ASTM Grade 2 fuel oil-fired 2000 kW rated output capacity Model: 3516, Serial No.: 4XF00419</p>	
	<p><u>Emergency Generator No. 4</u> – Caterpillar ASTM Grade 2 fuel oil-fired 350 kW rated output capacity Model: 3406B, Serial No.: 4RG01205</p>	
	<p><u>Emergency Generator No. 5</u> – Caterpillar ASTM Grade 2 fuel oil-fired 65 kW rated output capacity Model: 3304, Serial No.: 83Z02429</p>	
	<p><u>Emergency Generator No. 6</u> – Caterpillar ASTM Grade 2 fuel oil-fired 105 kW rated output capacity Model: 3304, Serial No.: 4B10118</p>	
	<p><u>Emergency Generator No. 7</u> – Caterpillar ASTM Grade 2 fuel oil-fired 2000 kW rated output capacity Model: 3516B, Serial No.: 4XF00419</p>	

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

2. BOILERS NOS. 1, 2, 3, AND 4

2.1 Process Description

St. Luke's Regional Medical Center includes four identical boilers that are used to provide steam for space heating requirements. The boilers were manufactured by Cleaver Brooks and each has a rated heat input capacity 29.29 MMBtu/hr. The stack parameters for each boiler are identical. Each boiler is dual-fuel rated and is allowed to combust natural gas or ASTM Grade 2 fuel oil.

Boilers Nos. 1,2,3, and 4 are currently subject to federal New Source Performance Standards (NSPS) in accordance with 40 CFR 60, Subpart Dc.

2.2 Control Description

Emissions from the boilers are uncontrolled

Emission Limits

2.3 Emissions Limits – When Combusting ASTM Grade 2 Fuel Oil

PM₁₀, CO, NO_x, and SO₂ from the boiler's stacks shall not exceed any corresponding emissions rate limits listed in Table 3.1 when combusting ASTM Grade 2 fuel oil.

Table 3.1 EMISSIONS LIMITS WHEN COMBUSTING ASTM GRADE 2 FUEL OIL

Source	PM ₁₀		CO		NO _x		SO ₂	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Boiler No. 1	0.42		1.05		4.2		14.86	
Boiler No. 2	0.42		1.05		4.2		14.86	
Boiler No. 3	0.42		1.05		4.2		14.86	
Boiler No. 4	0.42		1.05		4.2		14.86	
Boilers Combusting ASTM Grade 2 Fuel Oil		0.27		0.68		2.72		9.64

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 Particulate Matter Emissions

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid.

2.6

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: P-2007.0048

Permittee: St. Luke's Regional Medical Center

Location: Boise, Idaho

Facility ID No. 001-00029

40 CFR 60, Subpart Dc – Standards for Sulfur Dioxide

The permittee shall comply with all applicable standards for sulfur dioxide of 40 CFR 60, Subpart Dc.

- The facility shall not discharge, into the atmosphere, any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, the facility shall not combust oil that contains greater than 0.5 weight percent sulfur in accordance with 40 CFR 60.42c(d).
- Emission limits or fuel oil limits under this section may be determined based on a certification from the fuel supplier in accordance with 40 CFR 60.45c(h)(1)

[June 8, 2007]

Operating Requirements

2.7 Allowable Fuel Types for Boilers Nos. 1, 2, 3, and 4

The primary fuel for Boilers Nos. 1, 2, 3, and 4 shall be natural gas. The secondary fuel shall be ASTM Grade 2 fuel oil.

2.8 Natural Gas Combustion Limit

The maximum amount of natural gas combusted in Boilers Nos. 1, 2, 3, and 4, inclusive, shall not exceed 256 million cubic feet (MMft³) per any consecutive 12-month period.

2.9 Number of Boilers That Can Operate When Combusting ASTM Grade 2 Fuel Oil

Only one of the four boilers may be operated at a time while combusting ASTM Grade 2 fuel oil.

2.10 Boiler Daily Hours of Operation When Combusting ASTM Grade 2 Fuel Oil

When combusting ASTM Grade 2 fuel oil, no boiler shall be operated for more than 10 hours in any 24-hour period.

2.11 Boilers Annual Hours of Operation When Combusting ASTM Grade 2 Fuel Oil

When combusting ASTM Grade 2 fuel oil, boiler hours of operation in aggregate shall not exceed 1,298 hours per any consecutive 12-month period.

2.12 Sulfur Content

The permittee shall not sell, distribute, use, or make available or use any distillate fuel oil containing more than the following percentages of sulfur:

- ASTM Grade 2 fuel oil – 0.5% by weight

[June 8, 2007]

2.13 40 CFR 60, Subpart Dc – Compliance and Performance Test Methods and Procedures for Sulfur Dioxide

The permittee shall comply with all applicable Compliance and Performance Test Methods and Procedures for Sulfur Dioxide of 40 CFR 60, Subpart Dc.

- Compliance test for SO₂ shall consist of fuel certification from fuel supplier in accordance with 40 CFR 60.44c(h).

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: P-2007.0048

Permittee:	St. Luke's Regional Medical Center
Location:	Boise, Idaho

Facility ID No. 001-00029

Monitoring and Recordkeeping Requirements

2.14 Natural Gas Fuel Combustion

The permittee shall monitor and record monthly and annually the total amount of natural gas combusted in Boilers Nos. 1, 2, 3, and 4 to demonstrate compliance with Permit Condition 3.6. Records of this information shall be maintained in accordance with Permit Condition 2.9.

2.15 Operation When Combusting ASTM Grade 2 Fuel Oil

The permittee shall monitor and record the following information to demonstrate compliance with Permit Conditions 2.9, 2.10, and 2.11. Records of this information shall be maintained in accordance with General Provision 7.

- The date and the identity of the boiler combusting the fuel oil
- The date, the start time, the stop time, and a summation of the number of hours the boiler operated in any 24-hour period and any consecutive 12-month period.

2.16 40 CFR 60, Subpart Dc – Emissions Monitoring for Sulfur Dioxide

The permittee shall comply with all applicable Standards for sulfur dioxide and particulate matter of 40 CFR 60. Residual oil fuel supplier certification shall include the following:

- The name of the oil supplier in accordance with 40 CFR 60.48c(f)(1)(i)
- A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 45 CFR 60.41c in accordance with 40 CFR 60.78c(f)(1)(ii).

The permittee shall refer to the following sections of 40 CFR 60, Subpart Dc:

- Emissions Monitoring for SO₂: 40 CFR 60.46c(e)

[June 8, 2007]

Reporting Requirements

2.17 40 CFR 60, Subpart Dc – Reporting and Recordkeeping Requirements

In accordance with 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup as required by 40 CFR 60.7 for the boilers.

The notification shall include the following:

- the design heat input capacity of the affected facility,
- fuels to be combusted in the affected facility,
- the annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each fuel fired.

Notification shall be submitted to EPA and DEQ.

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

U.S. EPA – Region 10
Office of Air Quality
1200 Sixth Avenue
Seattle, WA 98101
Phone: (206) 553-1200

Air Quality Permit Compliance
Boise Regional Office
Idaho Department of Environmental Quality
1445 North Orchard
Boise, ID 83706-2239
Phone: (208) 373-0550

The monitoring and recordkeeping of fuels combusted in the boilers shall comply with 40 CFR 60.48c(g) and the following:

- The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each month.
- The permittee shall maintain written documentation of any EPA-approved monitoring, recordkeeping, and reporting requirements for the boilers.

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

[June 8, 2007]

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

3. EMERGENCY GENERATORS NOS. 1, 2, 3, 4, 5, 6, AND 7

3.1 Process Description

St. Lukes Regional Medical Center includes seven ASTM Grade 2 fuel oil-fired emergency generators. The model numbers, rated output capacities, and serial numbers for the generators 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 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.

3.4 Fuel Sulfur Content

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

Operating Requirements

3.5 Hours of Operation for Maintenance

- The operation of each emergency generator shall not exceed a maximum of six hours in any 24-hour period. Multiple generators can operate concurrently during a single day for load testing.
- The operation of each emergency generator shall not exceed a maximum of 208 hours in any consecutive 12-month period.

These hours of operations limit shall not apply during times of electric power outages to the hospital.

[June 8, 2007]

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0048		
Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

Monitoring and Recordkeeping Requirements

3.6 Emergency Generator Operation

The permittee shall monitor and record the date, number of hours of operation, and the reason for the operation of each emergency generator. Records of this information shall be maintained in accordance with General Provision 7.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

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.

[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.

[IDAPA 58.01.01.211, 5/1/94]

3. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

4. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
 - a. Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:
 - a. A notification of the date of initiation of construction, within five working days after occurrence;

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

- b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
- c. A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- e. A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211, 5/1/94]

Performance Testing

- 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.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

- 7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-2007.0048

Permittee:	St. Luke's Regional Medical Center	Facility ID No. 001-00029
Location:	Boise, Idaho	

Excess Emissions

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

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

9. 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.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

10. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

11. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

12. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

13. 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.