

## 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: **07 2008 - 009** Project Number: 2008-03-067

Parent Company: Centerpoint Medical Center, LLC

Parent Company Address: 19600 East 39th Street, Independence, MO 64057

Installation Name: Centerpoint Medical Center

Installation Address: 19600 East 39th Street, Independence, MO 64057

Location Information: Jackson County, S21, T49N, R31W

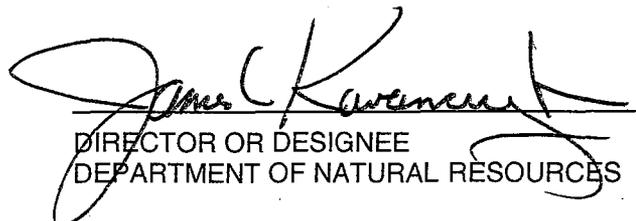
Application for Authority to Construct was made for:

The installation of two (2) 16.75 MMbtu dual fuel boilers, two (2) 1500 kW emergency generators, and two (2) 10,000 gallon fuel oil storage tanks. 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.

**JUL 22 2008**

EFFECTIVE DATE

  
 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 departments' 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. You must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 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.

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: Project Number: 2008-03-067

Parent Company: Centerpoint Medical Center, LLC

Parent Company Address: 19600 East 39th Street, Independence, MO 64057

Installation Name: Centerpoint Medical Center

Installation Address: 19600 East 39th Street, Independence, MO 64057

Location Information: Jackson County, S21, T49N, R31W

Application for Authority to Construct was made for:

The installation of two (2) 16.75 MMbtu dual fuel boilers, two (2) 1500 kW emergency generators, and two (2) 10,000 gallon fuel oil storage tanks. 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.

---

EFFECTIVE DATE

---

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 departments' 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 within 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.

Page No.	3
Permit No.	
Project No.	2008-03-067

**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."*

Centerpoint Medical Center  
Jackson County, S21, T49N, R31W

1. Emission Limitation – Nitrogen Oxides
  - A. Centerpoint Medical Center shall emit less than 40 tons of nitrogen oxides (NO<sub>x</sub>) in any consecutive 12 month period from the entire installation.
  - B. Centerpoint Medical Center shall maintain an accurate record of NO<sub>x</sub> emitted into the atmosphere from the entire installation. Attachment A or an equivalent form shall be used for this purpose. Centerpoint Medical Center 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. Centerpoint Medical Center shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 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.

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

Project Number: 2008-03-067  
Installation ID Number: 095-0315  
Permit Number:

Centerpoint Medical Center  
19600 East 39th Street  
Independence, MO 64057

Complete: March 18, 2008

Parent Company:  
Centerpoint Medical Center, LLC  
19600 East 39th Street  
Independence, MO 64057

Jackson County, S21, T49N, R31W

REVIEW SUMMARY

- Centerpoint Medical Center has applied for authority to install two (2) 16.75 MMbtu dual fuel boilers, two (2) 1500 kW emergency generators, and two (2) 10,000 gallon fuel oil underground storage tanks. .
- Hazardous air pollutant (HAP) emissions are expected due to the combustion of natural gas and No. 2 fuel oil.
- 40 CFR Part 60 Subpart "III" of the New Source Performance Standards (NSPS), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, does not apply to the emergency generator because the generator was manufactured in February of 2006 prior to the applicability date of April 1, 2006.
- 40 CFR Part 63 Subpart "ZZZZ" of the Maximum Achievable Control Technology (MACT), *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, applies to the emergency generator. None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) 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 nitrogen oxides (NO<sub>x</sub>) are conditioned to de minimis levels.
- This installation is located in Jackson 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 conditioned to de minimis levels.
- Emissions testing is not required for the equipment.
- Since the MACT applies only to the emergency generator, an Operating Permit is not required for this installation.
- Approval of this permit is recommended with special conditions.

### INSTALLATION/PROJECT DESCRIPTION

Centerpoint Medical Center is a new hospital located in Jackson County, Missouri. It was built to replace two aging facilities that are now both closed. The two original facilities were also located in Jackson County, Missouri. They were Medical Center of Independence, county-plant id number 095-0062 and Independence Regional Health Center, county-plant id number 095-0066.

Centerpoint Medical Center is a 500,000 square foot, level 2 trauma center, operating 24 hours per day, seven days per week. It was constructed without obtaining a construction permit and opened for business in May of 2007. The facility recognized on its own that a construction permit was never obtained and submitted an application in March of 2008.

Centerpoint Medical Center has included the following equipment in the permit application: two (2) Power Flame, model CM9A-GO-30, 16.75 million btu per hour dual fuel boilers, two (2) 10,000 gallon No. 2 fuel oil underground storage tanks, and two (2) 1500 kW emergency generators with Detroit Diesel, model 4000 MDEC, diesel engines. The boilers will burn primarily natural gas with No. 2 fuel oil (ultra low sulfur diesel) as the back up fuel.

As this is a new facility, no permits have been issued to Centerpoint Medical Center from the Air Pollution Control Program.

### 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* (9/98), Section 1.4 *Natural Gas Combustion* (7/98), and 3.4 *Large Stationary Diesel and All Stationary Dual-fuel Engines* (10/96). Potential emissions from the boilers and the storage tanks were calculated assuming continuous operation for 8760 hours per year. Potential emissions of the emergency generator were calculated assuming 500 hours per year. Sulfur oxide (SO<sub>x</sub>) emission calculations were based upon No. 2 fuel oil

having a maximum sulfur content of 0.0015 percent by weight (15 parts per million). The facility voluntarily requested that the project be limited to less than 40 tons per year of NO<sub>x</sub> in order to avoid dispersion modeling and increment analysis. The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Application	*New Installation Conditioned Potential
PM <sub>10</sub>	15.0	N/A	N/A	1.45	1.39
SO <sub>x</sub>	40.0	N/A	N/A	0.24	0.24
NO <sub>x</sub>	40.0	N/A	N/A	43.42	<40
VOC	40.0	N/A	N/A	1.33	1.24
CO	100.0	N/A	N/A	17.28	16.37
HAPs	10.0/25.0	N/A	N/A	0.27	0.26

N/A = Not Applicable \* Potential emissions proportionately reduced based upon NO<sub>x</sub> limit.

### 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 NO<sub>x</sub> are conditioned to de minimis levels.

### APPLICABLE REQUIREMENTS

Centerpoint Medical Center 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.

### 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 June 1 for the previous year's emissions.

- *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

- *Maximum Achievable Control Technology (MACT) Regulations, 10 CSR 10-6.075, National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart "ZZZZ"*
- *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 special conditions.

---

Kathi Jantz  
Environmental Engineer

---

Date

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated March 7, 2008, received March 18, 2008, designating Centerpoint Medical Center, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Kansas City Regional Office Site Survey, dated March 25, 2008.

## Attachment A - NO<sub>x</sub> Compliance Worksheet

Centerpoint Medical Center  
 Jackson County, S21, T49N, R31W  
 Project Number: 2008-03-067  
 Installation ID Number: 095-0315  
 Permit Number: \_\_\_\_\_

This sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
 (month, year) (month, year)

	Natural Gas Combusted in Boiler			Fuel Oil Combusted in Boiler			Fuel Oil Combusted in Generator			
Month	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
	Monthly Amount of Natural Gas Combusted (MMCF) <sup>6</sup>	Emission Factor (tons NO <sub>x</sub> per MMCF) <sup>1</sup>	Monthly NO <sub>x</sub> Emissions from Natural Gas <sup>2</sup> (Tons)	Monthly Amount of Fuel Oil Combusted in the Boiler (Mgal) <sup>6</sup>	Emission Factor (tons NO <sub>x</sub> per Mgal) <sup>1</sup>	Monthly NO <sub>x</sub> Emissions from Boiler Fuel Oil <sup>3</sup> (Tons)	Monthly Amount of Fuel Oil Combusted in the Generator (Mgal) <sup>6</sup>	Emission Factor (tons NO <sub>x</sub> per Mgal) <sup>1</sup>	Monthly NO <sub>x</sub> Emissions from Generator Fuel Oil <sup>4</sup> (Tons)	12-Month NO <sub>x</sub> Emissions <sup>5</sup> (Tons/Year)
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		
		0.05			0.01			0.22		

<sup>1</sup>Emission Factors taken from AP-42, *Compilation of Air Pollutant Emission Factors, Fifth Edition* Section 1.4 *Natural Gas Combustion* (7/98), Section 1.3 *Fuel Oil Combustion* (9/98), and Section 3.4 *Large Stationary Diesel and All Stationary Dual-fuel Engines* (10/96).

<sup>2</sup>Column 3 = Column 1 \* Column 2

<sup>3</sup>Column 6 = Column 4 \* Column 5

<sup>4</sup>Column 9 = Column 7 \* Column 8

<sup>5</sup>Column 10 = Column 3 + Column 6 + Column 9 + previous 11-months. (NOTE: For Column 10, a 12-Month total NO<sub>x</sub> emissions less than 40.0 tons indicates compliance.)

<sup>6</sup>MMCF = million cubic feet, Mgal = 1000 gallons

Mr. Kevin Fetters  
Director Facility Operations  
Centerpoint Medical Center  
19600 East 39th Street  
Independence, MO 64057

RE: New Source Review Permit - Project Number: 2008-03-067

Dear Mr. Fetters:

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 and your new source review permit application 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 Kathi Jantz, at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or 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:kjl

Enclosures

c: Kansas City Regional Office  
PAMS File: 2008-03-067

Permit Number: