

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
Memorial Medical Center for Revision of the
Federally Enforceable State Operating Permit (FESOP) for
701 North First Street
Springfield, Illinois 62707

Site Identification No.: 167120AKY
Application No.: 05020047

Schedule

Public Comment Period Begins: 9/19/2007
Public Comment Period Closes: 10/19/2007

Illinois EPA Contacts

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I. INTRODUCTION

Memorial Medical Center has applied for revision of its Federally Enforceable State Operating Permit (FESOP) for its Springfield location. This revision is to add a 900 kW Emergency/Standby Electric Generator. This facility requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the revised permit that it would propose to issue for the facility. However, before revising the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Memorial Medical Center is medical facility. The emission units at this plant that require an operating permit include boilers, generators (including an additional 900 kW Emergency/Standby Electric Generator), and ethylene oxides sterilizers. These units are sources of emissions because fuel combustion mainly of natural gas. These emissions include Nitrogen Oxides, Carbon Monoxide, and Sulfur Dioxide, and small amounts of ethylene oxide from the sterilizers.

III. GENERAL DISCUSSION

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source has been operating this facility under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need not obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for Nitrogen Oxides, Carbon Monoxide, and Sulfur Dioxide, 10 tons for an individual HAP, and 25 tons for combined HAPs.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. Illinois regulations limit sulfur content in fuel oil used in boilers, carbon monoxide, particulate matter and volatile organic material into the atmosphere. The application shows that the facility is in compliance with applicable state and federal emission standards.

V. CONTENTS OF THE PERMIT

The revised permit that the Illinois EPA is proposing to issue would continue to identify the specific emission standards that apply to the emission units at the facility.

The boilers must comply with 35 Ill. Adm. Code 216.121 and 214.122(b)(1) and (2). Section 216.121 requires boilers to not exceed a carbon dioxide emission of 200 ppm, corrected to 50 percent excess air. Section 214.122(b)(1) and (2) require each fuel combustion emission source not to exceed a sulfur dioxide emission of 0.3 and 1.0 lbs per mmBtu when burning #2 and #6 fuel oil respectively.

The standby engine generators must comply with 35 Ill. Adm. Code 214.301. Section 214.301 limits the emission of sulfur dioxide not to exceed 2,000 ppm from each generator.

The ethylene oxide sterilizers must comply with 35 Ill. Adm. Code 215.301. Section 215.301 limits the emissions of organic material to 8 pounds per hour for each sterilizer.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the facility to below the major-source-thresholds of 100 tons for Nitrogen Oxides, Carbon Monoxide, and Sulfur Dioxide, 10 tons for an individual HAP, and 25 tons for combined HAPs.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for renewal of its permit. The Illinois EPA is therefore proposing to renew the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

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