

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
St. John's Hospital for a
Federally Enforceable State Operating Permit (FESOP) for
800 East Carpenter Street
Springfield, Illinois 62769

Site Identification No.: 167120ACK
Application No.: 99110044

Illinois EPA Contacts
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I. INTRODUCTION

St. John's Hospital has applied for a Federally Enforceable State Operating Permit (FESOP) for its hospital at 800 East Carpenter Street in Springfield. This hospital requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the permit that it would propose to issue for the hospital. However, before issuing 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

St. John's Hospital provides health care services and operates four industrial boilers, two emergency natural gas-fired internal combustion engines, two emergency diesel generators and ethylene oxide sterilization process. The industrial boilers produce high-pressure steam used for general cooling and heating. The boilers burn natural gas and have the ability to use distillate fuel as the backup fuel.

The principal air contaminant emitted from the facility is nitrogen oxides which is generated from the fuel combustion process. Nitrogen oxides are formed thermally by a combination of oxygen and nitrogen in the air at a temperature at which fuel is burned.

In addition, sulfur dioxides (SO₂), carbon monoxide (CO), particulate matter (PM) and volatile organic material (VOM) are emissions formed by combustion processes. CO is formed by the incomplete combustion of fuel. SO₂ emissions are mostly generated during the combustion of fuel oil.

The ethylene oxide sterilizers emit ethylene oxide into the atmosphere. Ethylene oxide is a hazardous air pollutant and is also a volatile organic material.

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 plant 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 NO_x, 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. The application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

V. CONTENTS OF THE PERMIT

The permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

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 plant to below the major-source-thresholds of 100 tons for NO_x, 10 tons for an individual HAP and 25 tons for combined HAPs. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on monthly and annual natural gas usage and fuel oil usage. Since these items are limited, therefore the air emissions are limited.

The permit conditions 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 issuance of its permit. The Illinois EPA is therefore proposing to issue 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.