

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
217/785-1705

Project Summary
Federally Enforceable State Operating Permit (FESOP)
Provident Hospital of Cook County
500 East 51st Street
Chicago, Illinois

Site Identification No.: 031600FWB
Application No.: 07050072

Schedule

Public Comment Period Begins: September 17, 2014
Public Comment Period Closes: October 17, 2014

Illinois EPA Contacts

Permit Analyst: Jocelyn Stakely

Community Relations Coordinator: Brad Frost
217/782-7027
Brad.frost@illinois.gov

I. INTRODUCTION

An application has been voluntarily submitted by Provident Hospital of Cook County for their general medical and surgical hospital in order to voluntarily incorporate federally enforceable limits. These limits would prevent the above facility from being a major source of emissions so that an operating permit does not have to be obtained under the Clean Air Act Permit Program. The proposed limits would be accompanied by recordkeeping requirements to assure that the plant is operated as a non-major source. Unlike the site's current operating permit(s), these conditions would be enforceable by both the State of Illinois and USEPA.

II. SOURCE DESCRIPTION

Provident Hospital of Cook County is a general medical and surgical hospital designed to serve the health needs of the surrounding community located at 500 East 51st Street, in Chicago, Illinois. The facility emission sources include

Two (2) 55.4 mmBtu/hr Natural Gas/Distillate Fuel Oil-Fired Boilers (Boilers B-1 and B-2);
One (1) 12.6 mmBtu/hr Natural Gas Fired Boiler (B-3);
Two (2) 750kW (1,006 HP) Diesel Emergency Generator Sets (Diesel Generators 1 and 2); and
One (1) Ethylene Oxide Sterilizer

These are source of emissions because emissions generated from combustion are for Nitrogen Oxides (NO_x) and Sulfur Dioxide (SO₂).

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 will be 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 hospital 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 to obtain a Clean Air Act Permit Program (CAAPP) permit for the hospital, as would otherwise be required.

The FESOP limits the operation and annual emissions of the hospital to below the major-source-thresholds of 100 tons for NO_x, and 100 tons of SO₂.

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 Illinois Pollution Control Board has specific standards for units emitting volatile organic material (VOM) in the Greater Chicago Area. The specific standards for this company are New Source Performance Standard (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subpart ZZZZ. These regulations limit the NO_x, CO, VOM, PM and SO₂ emitted from the fuel combustion units. This source has emission limits in its permit that keep the amount of hazardous air pollutants below major levels therefore the NESHAP regulations do not apply. The application shows that the plant is in compliance with applicable state and federal 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 board has standards for sources of Nitrogen Oxides (NO_x) and Sulfur Dioxide (SO₂). The application shows that the hospital is in compliance with applicable state and federal emission standards.

The principal air contaminant of concern is Nitrogen Oxides (NO_x) and Sulfur Dioxide (SO₂) which is created by the combustion in the boilers and generators. The facility has limited their throughput that will keep the NO_x and SO₂ emissions below the major source threshold level of 100 tons per year for NO_x and SO₂.

V. CONTENTS OF THE PERMIT

The 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 plant.

The permit would also contain limitations and requirements to assure that this hospital 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 and 100 tons for SO₂. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the NO_x and SO₂ emissions from the source below the levels that would trigger the applicability of these rules.

The permit sets limitations on the hospital's emissions. These limitations are consistent with the historical operation and capacity of the facility.

The permit conditions would also continue to require appropriate testing of the unit, 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.