

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
Elgin Community College for a
Federally Enforceable State Operating Permit (FESOP)
for the operation of their Natural gas-fired boilers and engines
at 1700 Spartan Drive, Elgin, Kane County,
Illinois 60123

Site Identification No.: 089438AAE
Application No.: 05070026

Schedule

Public Comment Period Begins: February 17, 2009
Public Comment Period Closes: March 19, 2009

Illinois EPA Contacts

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I. INTRODUCTION

Elgin Community College applied for a Federally Enforceable State Operating Permit (FESOP) to operate three Boilers (45 mmBtu/hr combined), Fifteen Small boilers (23 mmBtu/hr combined) four 1135 BHP lean burn natural gas-fired stationary SI-IC engines, and one 1280 BHP lean burn natural gas-fired stationary SI-IC engines at the junior college and technical institute located at 1700 Spartan Drive, Elgin, Kane County, Illinois 60123. This facility requires an air pollution control operating permit because it is a source of NO_x, CO, PM, SO₂, and VOM emissions. The Illinois EPA has prepared a draft permit that it would propose to issue for the facility. 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

Elgin Community College is a junior college and technical institute that operates boilers and spark ignition IC engines for the purpose of providing the college campus with steam and hot water for heating and domestic hot water. Also the generator sets produce electricity under comEd rate 18. This system also uses heat recover from the engines to supplement steam provided by the boilers. The facility requires a permit because of the emissions from the boilers and engines. The principal pollutants of concern here are NO_x, CO, PM, SO₂, and VOM that are generated from the boilers and engine operation.

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.

This facility will be operating under a FESOP because the actual emissions of the facility are below the levels at which the facility would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the facility's potential emissions would be such that the facility would be considered a major source. The permit acts to restrict the facility 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 facility, as would otherwise be required.

The FESOP limits the operation and annual emissions of the facility to below the major-source-thresholds of 100 tons for NO_x, CO, PM₁₀, SO₂, and VOM, 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 board has standards for sources of Nitrogen oxides (NOx), Volatile Organic Material (VOM), Particulate Matter (PM10), Sulfur Dioxide (SO2) and Carbon Monoxide (CO) emission. The application shows that the facility 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 specific emission standards that apply to the emission units at the facility. The conditions of this permit are intended to ensure that the source will comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this facility 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 NOx, CO, VOM, PM10, SO2, and 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 (the minimum control efficiency and the amount of natural gas used at this facility. These limitations are consistent with the historical operation of emission units at the facility.

The permit conditions would also 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 facility is being operated within the limitations set by the permit and the facility'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 issuing of this 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.