

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
Lucent Technologies, Inc for Renewal of the
Federally Enforceable State Operating Permit (FESOP) for
Natural Gas Boilers and Emergency Generators

Site Identification No.: 043803AAD
Application No.: 04030022

Schedule

Public Comment Period Begins: January 29, 2007
Public Comment Period Closes: February 28, 2007

Illinois EPA Contacts

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I. INTRODUCTION

Lucent Technologies, Inc. has submitted an application for a federally enforceable state operating permit (FESOP) consisting of support equipment for their research laboratory, including eight steam boilers, two standby diesel-powered generators, and one small emergency diesel-powered generator. This permit prevents the site from being classified as a major source of emissions under the Clean Air Act. Therefore, Lucent Technologies, Inc. will not have to obtain a federal permit under the Clean Air Act Permit Program. The FESOP would contain limitations and accompanying recordkeeping and reporting requirements to assure that the site is operated as a non-major source. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would propose to issue for the plant. However, before renewing 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

The eight boilers, three emergency diesel-powered generators and gasoline dispensing facility are used by Lucent Technologies, Inc. to generate steam and electrical power for their own usage. Each generator-set consists of a reciprocating engine, which drives an electric generator by means of a rotating shaft. The reciprocating engines are driven by the combustion of distillate diesel fuel oil.

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 to 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 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 particulate matter, volatile organic material, and sulfur dioxide from boilers and reciprocating engines. The

application shows that the plant is in compliance with applicable state and federal emission standards.

The USEPA has also adopted standards for small steam generators for which construction was commenced after June 9, 1989, the federal New Source Performance Standards (NSPS), 40 CFR 60 Subpart Dc. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. This permit addresses compliance with the USEPA's standard for Small Steam Industrial-Commercial-Institutional Steam Generating Units

V. CONTENTS OF THE PERMIT

The renewed 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. As explained, the boilers, and generators are subject to a New Source Performance Standard (NSPS) for small industrial steam generating units, 40 CFR 60, Subparts A and Dc . 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 establish limitations on the amount of fuel that may be burned in the boilers and the number of hours in which the diesel-powered generators may be operated, and will limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for nitrogen oxides, 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 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.