

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF AIR, PERMIT SECTION
1021 N. GRAND AVENUE EAST
P.O. BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276
217/782-2113

Project Summary for an Application from
CenturyLink Technology Solutions – CH3 for
Federally Enforceable State Operating Permit (FESOP) for
Data Center
Elk Grove Village, Illinois

Site Identification No.: 043440AHQ
Application No.: 07100077

Schedule

Public Comment Period Begins: March 13, 2014
Public Comment Period Closes: April 12, 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 CenturyLink Technology Solutions – CH3 for their Data Center 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

CenturyLink Technology Solutions – CH3 located at 2425 South Busse Road in Elk Grove Village. The facility is a data center with back-up emergency generators to be used in event of power outages. Facility emission sources twelve (12) 2,000 kW (2,681 HP) and two (2) 2,250 kW (3,280 engine HP) generator sets. The principal air contaminant of concern is Nitrogen Oxides (NO_x) and Carbon Monoxide (CO) which is created by the combustion in the generators.

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 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 NO_x.

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 specific standards for this company are New Source Performance Standards (NSPS) for Stationary compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts IIII and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subparts 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. 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). The application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

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

V. CONTENTS OF THE PERMIT

This 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 per year for NO_x. (Annual emissions of other pollutants from the plant are well below the 100 tons major source threshold.)

The permit sets limitations on the data center emissions. These limitations are consistent with the historical operation and capacity of the facility.

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.