

## **I. INTRODUCTION**

NICOR Gas has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its office building, training center, and research & development facility located adjacent to Interstate 88 and Illinois Route 59 in Naperville, Dupage County. The CAAPP is the program established in Illinois to issue operating permits required for certain sources by the federal Clean Air Act, as amended in 1990. Unlike NICOR's current state operating permit, the conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (IEPA) and the USEPA.

## **II. SOURCE DESCRIPTION**

The NICOR Gas complex primarily functions as an office building, training center, and research & development center. Major emission units at this complex are four natural gas fired reciprocating engines (each 930 hp capacity) used for generating electricity for the complex and a natural gas fired boiler used for building heating . Three engines and a boiler were constructed in 1987 followed by an addition of one more engine in 1991.

## **III. EMISSIONS**

The principal air contaminants emitted from the engines and a boiler are nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), and volatile organic material (VOM) which are the products of combustion of fuel in the turbines.

The NICOR Gas complex is required to have a CAAPP permit since it is a major source of nitrogen oxides (NO<sub>x</sub>) emissions. This permit would limit the maximum annual emissions of NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and VOM from all significant emission units combined at the source to 175.7, 46, 1.8, 0.1, and 3.3 tons/year, respectively. The limit accounts for historical operation as well as the potential throughput of the station. Insignificant activities at the station are not accounted for in the source limit. These activities include items such as natural gas fired heaters/chillers, direct combustion units used for building heating and hot water generating, natural gas fired standby compressor, and organic liquid storage tanks.

## **IV. APPLICABLE EMISSION STANDARDS**

All emission sources in Illinois must comply with the Illinois Pollution Control Board ("Board") emission standards. The Board's emission standards represent the basic requirements for sources in Illinois. The Board's rules limits opacity to 30% from any emission unit. As part of its application, the Permittee has certified that it is in full compliance with applicable requirements. The Illinois EPA's review of the application and on-site inspections also indicate that the station is in compliance. There are no rules,

regulations, or requirements with future compliance dates that would apply to the NICOR Gas complex that need to be addressed by this CAAPP permit.

## **V. CONTENTS OF PERMIT**

A CAAPP permit contains conditions listing the applicable state and federal air pollution control regulations that apply to a source. The permit conditions also establish appropriate compliance procedures, including inspection practices, recordkeeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit. For example, the Permittee is required to maintain a maintenance and repair log to be certain that the engines are being maintained properly.

The permit sets emission limitations, operation, and control requirements for this source so that the source operates within the framework described in the CAAPP application. These limitations are consistent with the historical operation and capacity of the plant.

The station has historically been operated as a minor source for hazardous air pollutants (HAPs) and the Permittee has requested limits in their CAAPP permit so that their potential emissions of HAPs are restricted in such a manner that they continue to not be a major source for HAPs. For this purpose, the CAAPP permit limits this source's emissions of an individual HAP to less than 10 tons/year, and combined HAP emissions to less than 25 tons/year.

## **VII. REQUEST FOR COMMENTS**

It is the Illinois EPA's preliminary determination that the CAAPP application for NICOR Gas complex meets the standards for issuance of the proposed permits. The IEPA is therefore proposing to issue the proposed permits, subject to conditions as proposed in the draft permits.

Comments are requested on this proposed action by the IEPA and the proposed conditions on the draft permits. If substantial public interest is shown in this matter, the IEPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.