

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

**BUREAU OF AIR**

**DIVISION of AIR POLLUTION CONTROL**

**PERMIT SECTION**

PROJECT SUMMARY for the  
DRAFT CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

ANR Pipeline Company  
16744 Sandy Bluff Road,  
Sandwich

Illinois EPA ID Number: 093802AAF

Application Number: 95090250

Application Type: Renewal

Start of Public Comment Period: April 18, 2007

Close of Public Comment Period: May 18, 2007

Permit Engineer/Technical Contact: Jack Yates, 217/782-2113

Community Relations/Comments Contact: Brad Frost, 217/782-7027

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

## I. INTRODUCTION

This source has applied for a renewal of the Clean Air Act Permit Program (CAAPP) operating permit. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of Illinois' Environmental Protection Act. The conditions in a CAAPP permit are enforceable by the Illinois Environmental Protection Agency (Illinois EPA), the USEPA, and the public. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A CAAPP permit contains conditions identifying the applicable state and federal air pollution control requirements that apply to a source. The permit also establishes emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, 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. Further explanations of the specific provisions of the draft CAAPP permit are contained in the attachments to this document, which also identify the various emission units at the source.

## II. GENERAL SOURCE DESCRIPTION

### a. Nature of Source

The source employs large compressors driven by natural gas-fired reciprocating engines to recompress and move natural gas through transmission pipelines. The primary source of pollutants at this source is the natural gas fired reciprocating engines that power the compressors. These units emit combustion products during normal operation. There is no Emission Control Equipment.

### b. Ambient Air Quality Status for the Area

The source is located in an area that is currently designated moderate nonattainment for the National Ambient Air Quality Standards for ozone and PM<sub>2.5</sub> and attainment or unclassifiable for all other criteria pollutants (CO, lead, NO<sub>2</sub>, PM<sub>10</sub>, and sulfur dioxide).

### c. Major Source Status

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1. The source requires a CAAPP permit as a major source of NO<sub>x</sub>, CO, VOM, and HAP emissions.

d. Source Emissions

The following table lists annual emissions of criteria pollutants from this source, as reported in the Annual Emission Reports sent to the Illinois EPA.

	<b>Annual Emissions (tons)</b>
<b>Pollutant</b>	<b>2005</b>
CO	149.25
NO <sub>x</sub>	1,182.67
PM	12.16
SO <sub>2</sub>	0.19
VOM	74.48
Formaldehyde (top HAP)	16.08

### III. NEW SOURCE REVIEW/TITLE I CONDITIONS

This draft permit contains terms and conditions that address the applicability of permit programs for new and modified sources under Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the draft permit by T1, T1R, or T1N. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this draft permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new conditions or revise such conditions in a Title I permit, those conditions are consistent with the information provided in the CAAPP application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This draft permit would establish newly revised Title I requirements.

### IV. COMPLIANCE INFORMATION

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The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

## V. PROPOSED ILLINOIS EPA ACTION/REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested by the Illinois EPA for the draft or proposed permit, pursuant to 35 IAC Part 252 and Sections 39.5(8) and (9) of the Illinois Environmental Protection Act. A final decision on the draft or proposed permit will not be made until the public, affected states, and USEPA have had an opportunity to comment. The Illinois EPA is not required to accept recommendations that are not based on applicable requirements. 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.

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ATTACHMENT 1: Summary of Source-Wide Requirements

The following table indicates the source-wide emissions control programs and planning requirements that are applicable to this source. These programs are addressed in Sections 5 and 6 of the draft permit.

<b>Program/Plan</b>	<b>Applicable</b>
Emissions Reduction Market System (ERMS)	No
Nitrogen Oxides (NO <sub>x</sub> ) Trading Program	No
Acid Rain Program	No
Compliance Assurance Monitoring (CAM) Plan	No
Fugitive Particulate Matter (PM) Operating Program	No
Risk Management Plan (RMP)	No
PM <sub>10</sub> Contingency Measure Plan	No

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ATTACHMENT 2: Summary of Requirements for Specific Emission Units

The following tables include information on the requirements that apply to significant emission units at this source. The requirements are found in Section 7 of the draft permit, which is further divided into subsection, i.e., Section 7.1, 7.2, etc., for the different categories of units at the source. A separate table is provided for each subsection in Section 7 of the draft permit. An explanation of acronyms and abbreviations is contained in Section 2 of the draft permit.

Table 1 (Section 7.1 of the draft permit)

<b>Emission Unit – Internal Combustion Engines</b>	
Description	Natural Gas Fired Internal Combustion Engines
Date Constructed	Unit E-1005 1956 E-1006 1956 E-1007 1959 E-1008 1973 E-1009 1981 Generator 1999
Emission Control Equipment	None
<b>Applicable Rules and Requirements</b>	
Emission Standards	<ul style="list-style-type: none"> <li>• 35 IAC 214.301 No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm.</li> <li>• 35 IAC 215.301 No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material.</li> </ul>
Title I Conditions	<ul style="list-style-type: none"> <li>• The draft permit contains limits on operation and emissions in Conditions 7.1.5 and 7.1.6. These limits were incorporated from Permit 99080106.</li> </ul>

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<b>Emission Unit – Internal Combustion Engines</b>	
Non-Applicability	<ul style="list-style-type: none"> <li>• 35 IAC 212.322 This rule cannot reasonably be applied to the affected engines.</li> <li>• 35 IAC 216.121 The affected engines are not fuel combustion units.</li> <li>• 40 CFR Part 63, Subpart ZZZZ The affected engines are either an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, or an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, that do not have to comply with the requirements of 40 CFR Subpart ZZZZ.</li> </ul>
Non-Applicability (Continued)	<ul style="list-style-type: none"> <li>• 40 CFR Part 64 The affected engines do not use an add-on control device to achieve compliance with an emission limitation or standard.</li> <li>• 35 IAC 215.143 because the blowdown emissions associated with engines are not considered to be vapor blowdown pursuant to 35 IAC 215.143.</li> </ul>
<b>Reporting</b>	
Prompt Reporting	30 day reporting of exceedance of limits in Condition 7.1.5
Other Reporting	60 day reporting of exceedance of opacity limits in Condition 5.3.2(b)

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Table 2 (Section 7.2 of the draft permit)

<b>Emission Unit – Natural Gas-Fired Boilers</b>	
Description	Kewanee 5.5 mmBtu/Hour Maximum Firing Rate Cleaver Brooks 4.2 mmBtu/Hour Maximum Firing Rate
Date Constructed	Kewanee 1965 Cleaver Brooks 1959
Emission Control Equipment	None
<b>Applicable Rules and Requirements</b>	
Non-Applicability	<ul style="list-style-type: none"> <li>• 35 IAC 217.141, emissions of NO<sub>x</sub> from existing fuel combustion emission units in major metropolitan areas. The actual heat input of the affected boilers is less than 7.32 MW (250 mmBtu/hr), therefore, these rules do not apply.</li> <li>• 35 IAC 216.121, emissions of CO from existing fuel combustion emission units, The actual heat input of the affected boilers is less than 2.9 MW (10 mmBtu/hr), therefore, these rules do not apply.</li> <li>• 40 CFR 60, Subpart Dc New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, that applies to units constructed, reconstructed, or modified after June 9, 1989, with firing rates of 100 mmBtu/hr or less, but greater than 10 mmBtu/hr. The firing rates of the affected boiler are below the firing rates for which the NSPS would be applicable, therefore, these rules do not apply.</li> <li>• 40 CFR 63 Subpart DDDDD — National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. The affected boiler is rated at less than 2.9 MW (10 mmBtu/hr), therefore, these rules do not apply.</li> <li>• CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard, therefore, these rules do not apply.</li> </ul>
<b>Reporting</b>	

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<b>Emission Unit – Natural Gas-Fired Boilers</b>	
Prompt Reporting	30 Day reporting of deviations to requirements of Condition 7.2.10

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### ATTACHMENT 3: Prompt Reporting of Deviations

Prompt reporting of deviations is critical in order to have timely notice of deviations and the opportunity to respond, if necessary. The effectiveness of the permit depends upon, among other important elements, timely and accurate reporting. The Illinois EPA, USEPA and the public rely on timely and accurate reports submitted by the permittee to measure compliance and to direct investigation and follow-up activities. Prompt reporting is evidence of a permittee's good faith in disclosing deviations and describing the steps taken to return to compliance and prevent similar incidents.

Any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in this CAAPP permit is a deviation subject to prompt reporting. Additionally, any failure to comply with any permit term or condition is a deviation of that permit term or condition and must be reported to the Illinois EPA as a permit deviation. The deviation may or may not be a violation of an emission limitation or standard. A permit deviation can exist even though other indicators of compliance suggest that no emissions violation or exceedance has occurred. Reporting permit deviations does not necessarily result in enforcement action. The Illinois EPA has the discretion to take enforcement action for permit deviations that may or may not constitute an emission limitation or standard or the like, as necessary and appropriate.

Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act, which mirrors 40 CFR 70.6(a)(3)(iii)(B), requires prompt reporting of deviations from the permit requirements. The permitting authority (in this case, Illinois EPA) has the discretion to define "prompt" in relation to the degree and type of deviation likely to occur. Furthermore, Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act, which mirrors 40 CFR 70.6(a)(3)(iii)(A) requires that monitoring reports must be submitted at least every 6 months. Therefore, USEPA generally considers anything less than 6 months to be "prompt" as long as the selected time frame is justified appropriately (60 Fed. Reg. 36083, 36086 (July 13, 1995)).

The USEPA has stated that, for purposes of administrative efficiency and clarity, it is acceptable to define prompt in each individual permit. *Id.* The Illinois EPA has elected to follow this approach and defines prompt reporting on a permit by permit basis. In instances where the underlying applicable requirement contains "prompt" reporting, this frequency or a shorter frequency of reporting is the required timeframe used in this permit. Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA has developed a structured manner to determine the reporting approach used in this permit.

The Illinois EPA generally uses a time frame of 30 days to define prompt reporting of most deviations. Also, for certain permit conditions in individual permits, the Illinois EPA may require an alternate timeframe that is less than 30 days if the permit requirement justifies a

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shorter reporting time period. Under certain circumstances, EPA may establish a deviation reporting period longer than 30 days, but, in no event exceeding 6 months. Where it has established a deviation reporting period other than 30 days in an individual permit (specifically Section 7.x.10), the Illinois EPA has explained the reason for the alternative timeframe. (See Attachment 2 of this Project Summary.)

The timing for certain deviation reporting may be different when a source or emission unit at a source warrants reporting to address operation, independent of the occurrence of any deviations. This is the case for a source that is required to perform continuous monitoring for the emission unit, for which quarterly or semi-annual “monitoring” reports are appropriate. Where appropriate, reporting of deviations has generally been combined in, or coordinated with these quarterly or semi-annual reports, so that the overall performance of the plant can be reviewed in a comprehensive fashion. This will allow a more effective and efficient review of the overall performance of the source by the Illinois EPA and other interested parties, as well as by the source itself.

At the same time, there are certain deviations for which quicker reporting is appropriate. These are deviations for which individual attention or concern may be warranted by the Illinois EPA, USEPA, and other interested parties. Under this scenario, emphasis has been placed primarily on deviations that could represent substantial violations of applicable emission standards or lapses in control measures at the source. For these purposes, depending on the deviation, immediate notification may be required and preceded by a follow-up report submitted within 15 days, during which time the source may further assess the deviation and prepare its detailed plan of corrective action.

In determining the timeframe for prompt reporting, the Illinois EPA assesses a variety of criteria such as:

- historical ability to remain in continued compliance,
- level of public interest in a specific pollutant and/or source,
- seriousness of the deviation and potential to cause harm,
- importance of applicable requirement to achieving environmental goals,
- designation of the area (i.e., non-attainment or attainment),
- consistency among industry type and category,
- frequency of required continuous monitoring reports (i.e., quarterly),
- type of monitoring (inspection, emissions, operational, etc.), and
- air pollution control device type and operation

These prompt reporting decisions reflect the Illinois EPA’s consideration of the possible nature of deviations by different emission units and the responses that might be required or taken for those different types of deviations. As a consequence, the conditions for different emission units

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may identify types of deviations which include but are not limited to: 1) Immediate (or very quick) notification; 2) Notification within 30 days as the standard; or 3) Notification with regular quarterly or semi-annual monitoring reports.

The Illinois EPA's decision to use the above stated prompt reporting approach for deviations as it pertains to establishing a shorter timeframe in certain circumstances reflects the criteria discussed as well as USEPA guidance on the topic.

- 40 CFR 71.6(a)(3)(iii)(B) specifies that certain potentially serious deviations must be reported within 24 or 48 hours, but provides for semi-annual reporting of other deviations. (Serious or severe consequences)
- FR Vol. 60, No. 134, July 13, 1995, pg. 36086 states that prompt should generally be defined as requiring reporting within two to ten days of the deviation, but longer time periods may be acceptable for a source with a low level of excess emissions. (intermediate consequences)
- Policy Statement typically referred to as the "Audit Policy" published by the USEPA defines prompt disclosure to be within 21 days of discovery. (Standard for most "pollutant limiting" related conditions)
- Responses to various States by USEPA regarding other States' definition of prompt.

As a result, the Illinois EPA's approach to prompt reporting for deviations as discussed herein is consistent with the requirements of 39.5(7)(f)(ii) of the Act as well as 40 CFR part 70 and the CAA. This reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant individual attention. The timing for these event-specific notifications is necessary and appropriate as it gives the source enough time to conduct a thorough investigation into the causes of an event, collecting any necessary data, and to develop preventative measures, to reduce the likelihood of similar events, all of which must be addressed in the notification for the deviation.

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