

217/782-2113

RENEWAL
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

The Peoples Gas Light and Coke Company
Attn: Thomas L. Puracchio, Manager
230 County Road 2800 North
Fisher, Illinois 61843

I.D. No.: 019813AAA
Application No.: 95120163

Date Received: April 12, 2007
Date Issued: March 5, 2012
Expiration Date¹: March 5, 2017

Operation of: Natural Gas Transmission Station
Source Location: 230 East county Road 2800 North, Fisher, Champaign
Responsible Official: Tom Zack, VP Gas Supply

This permit is hereby granted to the above-designated Permittee to OPERATE a natural gas transmission station, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Mohamed Anane at 217/785-1705.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

ECB:MA:psj

cc: Illinois EPA, FOS, Region 3
CES
Lotus Notes

1 Except as provided in Conditions 1.5 and 8.7 of this permit.

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1.0 INTRODUCTION

1.1 Source Identification

The Peoples Gas Light and Coke Company, Manlove Storage Field
230 East County Road 2800 North
Fisher, Illinois 61843
217/897-7100

I.D. No.: 019813AAA
County: Champaign
Standard Industrial Classification: 4922, Natural Gas Transmission

1.2 Owner/Parent Company

The Peoples Gas Light and Coke Company
130 East Randolph Drive, 20th Floor
Chicago, Illinois 60601-6207

1.3 Operator

The Peoples Gas Light and Coke Company
130 East Randolph Drive, 20th Floor
Chicago, Illinois 60601-6207

Thomas L. Puracchio, Manager Gas Storage
217/897-7100

1.4 Source Description

The Peoples Gas Light and Coke Company is located at 230 East County Road 2800 North in Fisher. The source operates compressors, dehydration units, generators and storage fields for the transmission of natural gas.

Note: This narrative description is for informational purposes only and is not enforceable.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations there under. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

- a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1".

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Air Compressors
Alcohol Tank (T-17)
Alcohol Tank (T-19)
Alcohol Tank (T-21)
Ambitrol Expansion Tanks(T-C1 and T-C6)
C2 Waste Oil Tank (T-11)
Clark Used Oil Tank(T-9)
Clark Used Oil Tank(T-15)
Cold Solvent Parts Cleaning
CO₂ Removal Operation Plant Liquids Tank (T24 and T-26)
Cooper Lube Oil Tank (T-7)
Cooper Lube Oil Tank (T-8)
Dehy Area Waste Tank (T-18)
Dehydration Units Reboilers (D-1 through D-8)
Diesel Fuel Tank (-13)
Dirty Glycol Tank (T-16)
Engine Coolant Tank (T-3)
Engine Coolant Tank (T-18)
Equipment Leaks Including: Valves, Pressure Relief Valves,
Pumps, Flanges and Connectors, and Open-ended Lines
Ethylene Glycol/Water Expansion Tank (T-25)
Ethylene Glycol/water Boiler Make-up Tank (T-25a)
Fire Control Equipment
Firefighting Foam Tank (T-30)
Fire Water Pond Heater (H-FP)
Fire Water Tank Heater
Foam Building Spill Tank (T-22)
Fresh Glycol Tank (T-20)
Gasoline Tank (T-1)
HW Boiler Compressor Building #2 and #4 (B-CB2 and B-CB4)
Indirect Heaters < 10 mmBtu/hr (IND HTR < 10)
Line Heater (LINE HTR)
Lagoon Heater (H-L)
Boiler Building Spill Tank (T-25)
LNG Emergency Generator 35 KVA
LNG Fuel Gas Heater and LNG Fuel Gas Heater South (H-LF1 and H-LF2)
LNG Generator Ambitrol Coolant Tank (T-31)
LNG HW Boiler (B-LNG)
LNG Lube Oil Tank (T-2)
LNG Storage Tanks (LNG1 and LNG2)
LNG Used Oil Tank (T-10)
Lubricating Oil Systems and Venting
Mahomet Line Fuel Gas Heater (H-SF2)
Main Shop Waste Oil Tank (T-12)
Main Shop Waste Oil Tank (T-19)
North Steam Boiler and South Steam Boiler (B-N and B-S)

Plant Roads
Portable Emergency Generator 7033
Reclaimed Glycol Tanks (T-5 and T-28)
Station Fuel Gas Heater (H-SF1)
Trunkline Heater (TNKLN HTR)
Triethylene Glycol Reclaimer No. 1 (combustion exhaust)
Triethylene Glycol Reclaimer No. 1 (process exhaust)
UCON Tank (T-14)
Waste UCON Tank (T-4)

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

- Cummings Generator 67 hp Natural Gas Fired
- Portable Emergency Generator 125 hp Diesel Fuel Fired

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.
- 3.2.4 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.
- 3.2.5 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70°F, the Permittee shall comply with the applicable requirements of 35 IAC 215.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

3.4 National Emission Standards for Hazardous Air Pollutants (NESHAP) - Boilers

Pursuant to 40 CFR 63, Subpart DDDDD (NESHAP Standards for Natural Gas Boilers and Process Heaters) finalized on March 21, 2011. The source must comply with the following requirements beginning March 22, 2014.

- i. Meet the applicable general provisions of 40 CFR 63 Subpart A.
- ii. Conduct a tune-up of the boilers biennially as specified in 40 CFR 63.7540, pursuant to 40 CFR 63.7500(a)(1) and 40 CFR 63 Subpart DDDDD Table 3. Pursuant to 40 CFR 63.7515(e), each biennially tune-up must be no more than 25 months after the previous tune-up.
- iii. Must meet the applicable notification requirements of 40 CFR 63.7545 and 40 CFR Part 63 Subpart A.

Note: USEPA has waved the initial notification requirements and thus the source is not required to submit.

- iv. Must meet the applicable reporting requirements of 40 CFR 63.7550.

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Cooper Compressor #1 - 33 mmBtu/hr Natural Gas Fired Engine	1972	None
	Clark Compressor #2 - 9.6 mmBtu/hr Natural Gas Fired Engine	1965/1966	None
	Clark Compressor #3 - 9.6 mmBtu/hr Natural Gas Fired Engine	1965/1966	None
	Clark Compressor #4 - 9.6 mmBtu/hr Natural Gas Fired Engine	1967	None
	Clark Compressor #5 - 9.6mmBtu/hr Natural Gas Fired Engine	1969	None
	Cooper Compressor #6 - 32.8 mmBtu/hr Natural Gas Fired Engine	1977	None
	Waukesha Generator #1 - 9.4 mmBtu/hr Natural Gas Fired Engine	1972	Catalytic Converter System CC1
	Waukesha Generator #2 - 9.4 mmBtu/hr Natural Gas Fired Engine	1972	Catalytic Converter System CC2
	Waukesha Generator #3 - 9.4 mmBtu/hr Natural Gas Fired Engine	1972	Catalytic Converter System CC3
	Waukesha Generator #4 - 9.4 mmBtu/hr Natural Gas Fired Engine	1972	Catalytic Converter System CC4
	Caterpillar Generator #1 - 4.5 mmBtu/hr Natural Gas Fired Engine	1978	None
	Caterpillar Generator #2 - 4.5 mmBtu/hr Natural Gas Fired Engine	1978	None
02	West Inlet Natural Gas Fired 11.2 mmBtu/hr Indirect Heater	1984/1985	None
	North East Natural Gas Fired 28 mmBtu/hr Indirect Heater	1972	None
	South East Natural Gas Fired 28 mmBtu/hr Indirect Heater	1979	None
03	LNG Natural Gas Fired 18 mmBtu/hr Regeneration Heater	1999	None
	South Inlet Natural Gas Fired 26.6 mmBtu/hr Indirect Heater	1989	None
	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #1	1993	None
	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #2	1993	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #3	1993	None
03 (Cont.)	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #4	1993	None
	CO ₂ Natural Gas Fired 33 mmBtu/hr Removal Regeneration Heater	1995	None
04	Dehydrator and Glycol Reboiler #1 - 0.67 mmBtu/hr Natural Gas Fired	1966	Thermal Oxidizer #1
	Dehydrator and Glycol Reboiler #2 - 0.67 mmBtu/hr Natural Gas Fired	1966	Thermal Oxidizer #2
	Dehydrator and Glycol Reboiler #3 - 0.67 mmBtu/hr Natural Gas Fired	1967	Thermal Oxidizer #3
	Dehydrator and Glycol Reboiler #4 - 1.33 mmBtu/hr Natural Gas Fired	1968	Thermal Oxidizer #4
	Dehydrator and Glycol Reboiler #5 - 1.33 mmBtu/hr Natural Gas Fired	1972	Thermal Oxidizer #5
	Dehydrator and Glycol Reboiler #6 - 1.25 mmBtu/hr Natural Gas Fired	1974	Thermal Oxidizer #6
	Dehydrator and Glycol Reboiler #7 - 1.25 mmBtu/hr Natural Gas Fired	1977	Thermal Oxidizer #7
	Dehydrator and Glycol Reboiler #8 - 2.66 mmBtu/hr Natural Gas Fired	1989	Thermal Oxidizer #8

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO_x, CO, VOM/HAP, and GHG's emissions.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (CO, lead, NO₂, ozone, PM_{2.5}, PM₁₀, SO₂).

5.3 Source-Wide Applicable Provisions and Regulations

5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.

5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

5.3.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the IEPA an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in the Episode Action Plan should an air pollution alert or emergency be declared, as required by 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D.

- c. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the Episode Action Plan, a revised Episode Action Plan shall be submitted to the IEPA for review within 30 days of the change and is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. In the event that the IEPA notifies the Permittee of a deficiency with any revision to the Episode Action Plan, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.
- d. The Episode Action Plan, as submitted by the Permittee, is incorporated herein by reference. The document constitutes the formal Episode Action Plan required by 35 IAC 244.142, addressing the actions that will be implemented to reduce SO₂, PM₁₀, NO₂, CO and VOM emissions from various emissions units in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- e. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Episode Action Plan, any amendments or revisions to the Episode Action Plan (as required by Condition 3.2(c)), and the Permittee shall also keep a record of activities completed according to the Episode Action Plan.

5.3.7 PM₁₀ Contingency Measure Plan

Should the actual annual source-wide emissions of PM₁₀ equal or exceed 15 tons, then the Permittee shall prepare and submit a contingency measure plan reflecting the PM₁₀ emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall submit such plan to the Illinois EPA for review and approval within ninety (90) days after the date this source becomes subject to this requirement. Such plan will be incorporated by reference into this permit and shall be implemented by the Permittee in accordance with 35 IAC 212.704 following notification by the Illinois EPA. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U. This permit may also have to be revised or reopened to address this regulation (see Condition 9.12.2).

5.3.8 Energy Assessment (40 CFR 63, Subpart DDDDD)

Pursuant to 40 CFR 63.7500(a)(1) and Item 3 of Table 3 of 40 CFR 63 Subpart DDDDD, the Permittee must have a one-time energy assessment performed on the major source facility (i.e., the facility) by a qualified energy assessor. This energy assessment shall be completed no later than the applicable compliance date of this NESHAP for existing sources and meet requirements in Table 3, including preparation of a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. This energy assessment shall be conducted consistent with the definitions for "energy

assessment", "energy management practices" and "energy use system" in 40 CFR 63.7575

5.4 Source-Wide Non-Applicability of Regulations of Concern

Should this source become subject to 35 IAC 212.302, the Permittee shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). Any future Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Permittee of a deficiency with any Fugitive PM Operating Program, the Permittee shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	422.86
Sulfur Dioxide (SO ₂)	1.69
Particulate Matter (PM)	45.30
Nitrogen Oxides (NO _x)	1,913.83
HAP, not included in VOM or PM	
Total	2,383.68

5.6.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.6.3 Other Source-Wide Production and Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for PSD, state rules for MSSCAM, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 Source-Wide Testing Requirements

- a. Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7)(a) of the Act]
- b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator: The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the IEPA: The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

5.8 Source-Wide Monitoring Requirements

a. Fugitive Particulate Matter

Pursuant to 35 IAC 212.301 and 35 IAC 212.314, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally

toward the zenith at a point beyond the property line of the source unless the wind speed is greater than 25 mph.

b. Compliance Method (Fugitive Particulate Matter)

Upon request by the IEPA, the Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request, observations shall begin either within one day or three days of receipt of a written request from the IEPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

5.9.2 Records for HAP Emissions

The Permittee shall maintain records of individual and combined HAP emissions on a monthly and annual (running 12 month total) basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.2, pursuant to Section 39.5(7)(b) of the Act.

5.9.3 Records for Testing

Pursuant to 39.5(7)(a) of the Act, if testing is required, the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, test results.

5.9.4 Retention and Availability of Records

a. Pursuant to 39.5(7)(ii), all records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

- b. Pursuant to 39.5(7)(a) of the Act, the Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, including the emissions of HAP's from 5.9.2, as required by IAC Part 254.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source. However, there are provisions for unit specific operational flexibility set forth in Section 7 of this permit.

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be addressed by the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

This section is reserved for emissions control programs. As of the date of issuance of this permit, there are no such programs applicable to this source.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Engines (4-Stroke and 2-Stroke Lean Burn)

7.1.1 Description

The engines are process emission units used to provide power for the natural gas compressors and to provide power to electric generators. All engines are powered by natural gas. The backup generator and the emergency generator are considered insignificant activities.

Note: This narrative description is for informational purposes only and is not enforceable.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Cooper Compressor #1 - 9.6 mmBtu/hr Natural Gas Fired Engine	None
	Clark Compressor #2 - 9.6 mmBtu/hr Natural Gas Fired Engine	None
	Clark Compressor #3 - 9.6 mmBtu/hr Natural Gas Fired Engine	None
	Clark Compressor #4 - 9.6 mmBtu/hr Natural Gas Fired Engine	None
	Clark Compressor #5 - 33 mmBtu/hr Natural Gas Fired Engine	None
	Cooper Compressor #6 - 32.8 mmBtu/hr Natural Gas Fired Engine	None
	Waukesha Generator #1 - 9.4 mmBtu/hr Natural Gas Fired Engine	Catalytic Converter System CC1
	Waukesha Generator #2 - 9.4 mmBtu/hr Natural Gas Fired Engine	Catalytic Converter System CC2
	Waukesha Generator #3 - 9.4 mmBtu/hr Natural Gas Fired Engine	Catalytic Converter System CC3
	Waukesha Generator #4 - 9.4 mmBtu/hr Natural Gas Fired Engine	Catalytic Converter System CC4
	Caterpillar Generator #1 - 4.5 mmBtu/hr Natural Gas Fired Engine	None
	Caterpillar Generator #2 - 4.5 mmBtu/hr Natural Gas Fired Engine	None

Emission Unit	Description	Emission Control Equipment
	Cummings Backup Generator 67 hp Natural Gas Fired	None
	Herculus Portable Emergency Generator 125 hp Diesel Fuel Fired	None

7.1.3 Applicable Provisions and Regulations

- a. The "affected engines" for the purpose of these unit-specific conditions, are engines described in Conditions 7.1.1 and 7.1.2.
- b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm [35 IAC 214.301].
- c. The "affected engines" are subject to 40 CFR Part 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), pursuant to 63.6590(b)(3)(i) and (ii) the affected engines do not have to meet the requirements of Subpart ZZZZ and of the Subpart A, including initial notification requirements.
- d. Pursuant to 35 IAC 212.123 , visible emissions limitations for all other emission units.
- e. person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected engines are not subject to the New Source Performance Standards (NSPS) for internal combustion engines, 40 CFR Part 60, Subpart JJJJ, because the affected engines have been constructed before June 12, 2006 (See section 4 in this permit for the dates of construction).
- b. The affected engines are not subject to 35 IAC 212.321 or 212.322, because of the unique nature of these units, a process weight rate cannot be set, thus such rules cannot be applied.
- c.
 - i. The affected engines without control device are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected engines achieve compliance with emission limitation or standard.
 - ii. The affected engines equipped with catalytic converter system (CCS) are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because do not have potential pre-control device emissions of the applicable regulated

air pollutant that equals or exceeds major threshold levels.

- d. The affected engines are not subject to 35 IAC 214.121, because the affected engines actual heat input is less than 73.2 MW (250 mmBtu/hr).
- e. The affected engines are not subject to 35 IAC 217.141, because the affected engines are not fuel combustion units, as defined by 35 IAC 211.2470.
- f. The affected engines are not subject to 35 IAC 215.301, because the affected engines do not use organic material that would make them subject to 35 IAC 215.301.

7.1.5 Control Requirements and Work Practices

- a. Pursuant to 39.5(7)(a) of the Act, the Permittee shall follow good operating practices for the affected engines, including periodic inspections, routine maintenance and prompt repair of defects.
- b. Pursuant to 39.5(7)(a) of the Act, pipeline quality natural gas shall be the only fuel fired in the affected engines.

7.1.6 Production and Emission Limitations

Production and emission limitations are not set for the affected engines. However, there are source-wide production and emission limitations set forth in Condition 5.6.

7.1.7 Testing Requirements

- a. Pursuant to the opacity limitations shown in Condition 7.1.3(d), the Permittee shall conduct observations of the affected engines exhaust plume for visual emissions semiannually [39.5(7)(d) of the Act]:
 - i. Visible emissions observations shall be made using Method 22 with an observation period of at least six (6) minutes.
 - ii. If no visible emissions are observed, pursuant to Method 22, then it shall be recorded that the engine opacity emissions are less than 30 percent.
 - iii. If visible emissions are determined during the observation of the affected engines, the Permittee is required to determine the affected engines visual opacity emissions subsequent to the Method 22 observations pursuant to Method 9.
 - iv. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
 - A. Date and time of testing.

- B. Name and employer of qualified observer.
- C. Copy of current certification.
- D. Description of observation conditions.
- E. Description of engine operating conditions.
- F. Raw data.
- G. Opacity determinations.
- H. Conclusions.

7.1.8 Monitoring Requirements

a. Opacity

Pursuant to the opacity limitations shown in Condition 7.1.3(d), the Permittee shall conduct observations of the affected engines exhaust plume for visual emissions semiannually [39.5(7)(d) of the Act]:

- i. Visible emissions observations shall be made using Method 22 with an observation period of at least six (6) minutes.
- ii. If no visible emissions are observed, pursuant to Method 22, then it shall be recorded that the engine opacity emissions are less than 30 percent.
- iii. If visible emissions are determined during the observation of the affected engines, the Permittee is required to determine the affected engines visual opacity emissions subsequent to the Method 22 observations pursuant to Method 9 and the requirements in Condition 7.1.7(a).

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected engine to demonstrate compliance with Condition 5.6.1 and 7.1.3 through 7.1.8, pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas usage for each affected engine, mmscf/mo and mmscf/yr.
- b. Operating hours of operation for each engine, hrs/month and hrs/yr.
- c. Emissions of each pollutant from the affected engines with supporting calculations including documentation on the validity of the emission factors used, tons/month and tons/yr.

- d. Copies of method 9 and method 22.
- e. Copies demonstrating pipeline quality natural gas.

7.1.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of affected engines with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Opacity from the affected engines in excess of the limits specified in Condition 7.1.3 within 30 days of such occurrence.
- ii. The Permittee shall Operate the affected engines as specified in Condition 7.1.5 , and shall make prompt repair of defect within 30 days of such occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected engines.

7.1.12 Compliance Procedures

- a. Compliance with Condition 7.1.(e) is addressed by the requirements of Condition 7.1.5(a) and the records and reports required in Conditions 7.1.9(c) and 7.1.10(a).
- b. Compliance with the SO₂ emission limitation of Condition 7.1.(c) is addressed by the records and reports required in Conditions 7.1.9(c) and 7.1.10(a).
- c. Compliance with the SO₂ emission limitation of Condition 5.6 is addressed by the records and reports required in Conditions 7.1.9 and 7.1.10.
- d. Compliance with the opacity emission limitations of Condition 7.1.3(e) is addressed by the requirements of Condition 7.1.5(a), the testing requirements in Condition 7.1.7(a), the monitoring requirements in Condition 7.1.8(a), the records and reports required in Conditions 7.1.9(c) and 7.1.10(a).

7.2 Indirect Pipeline Heaters

7.2.1 Description

The indirect pipeline heaters are fuel combustion emission units used to provide for indirect heating of pipeline natural gas to prevent hydrate formation as gas is withdrawn from storage. The pipeline heaters burn natural gas as the fuel.

Note: his narrative description is for informational purposes only and is not enforceable.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
02	West Inlet Natural Gas Fired 11.2 mmBtu/hr Indirect Heater	1984/1985	None
	North East Natural Gas Fired 28 mmBtu/hr Indirect Heater	1972	None
	South East Natural Gas Fired 28 mmBtu/hr Indirect Heater	1979	None

7.2.3 Applicable Provisions and Regulations

- a. The "affected pipeline heaters" for the purpose of these unit-specific conditions, are fuel combustion emission units described in Conditions 7.2.1 and 7.2.2.
- b. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 10 mmBtu/hr to exceed 2000 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- c. Pursuant to 35 IAC 212.123 , visible emissions limitations for all other emission units.
 - i. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.
- d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm [35 IAC 214.301].
- e. The affected pipeline heaters are subject to 40 CFR Part 63, Subpart DDDDD -National Emission Standards for Hazardous Air Pollutants (NESHAP)for Industrial, Commercial, and Institutional Boilers and Process Heaters. Because the affected pipeline heaters burn natural gas only, they considered Gas 1 Subcategory for purposes of this NESHAP.

7.2.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected pipeline heaters not being subject to the New Source Performance Standards (NSPS) for Small Industrial - Commercial - Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc, because the affected pipeline heaters' construction, modification, or reconstruction was commenced before June 9, 1989.
- b. The affected pipeline heaters are not subject to 35 IAC 215.301 and 215.302, because the affected pipeline heaters are fuel combustion emission units [35 IAC 215.303].
- c. The affected pipeline heaters are not subject to the requirements of the NO_x Compliance Programs of 35 IAC Part 217.121(a), because the affected pipeline heaters have an actual heat input less than 73.2 MW (250 mmBtu/hr).
- d. The affected pipeline heaters are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected pipeline heaters do not use an add-on control device to achieve compliance with an emission limitation or standard.
- e. The affected engines are not subject to 35 IAC 212.321 or 212.322, due to the nature of such units, a process weight rate cannot be so set that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.

7.2.5 Control Requirements and Work Practices

- a. Pursuant to 40 CFR 63.7499, The affected pipeline heaters are Gas 1 Subcategory for the purposes of the 40 CFR Part 63, Subpart DDDDD. Beginning of the compliance date of this NESHAP, the Permittee must conduct a tune-up for each affected pipeline heater annually as specified in 40 CFR 63.7515(e).
- b. Pipeline quality natural gas shall be the only fuel fired in the affected indirect pipeline heaters.

7.2.6 Production and Emission Limitations

Production and emission limitations are not set for the affected pipeline heaters.

7.2.7 Testing Requirements

- a. Pursuant to the opacity limitations shown in Condition 7.2.3(c), the Permittee shall conduct observations of the affected engines exhaust plume for visual emissions semiannually [39.5(7)(d) of the Act]:
 - i. Visible emissions observations shall be made using Method 22 with an observation period of at least six (6) minutes.

- ii. If no visible emissions are observed, pursuant to Method 22, then it shall be recorded that the engine opacity emissions are less than 30 percent.
- iii. If visible emissions are determined during the observation of the affected engines, the Permittee is required to determine the affected engines visual opacity emissions subsequent to the Method 22 observations pursuant to Method 9.
- iv. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
 - A. Date and time of testing.
 - B. Name and employer of qualified observer.
 - C. Copy of current certification.
 - D. Description of observation conditions.
 - E. Description of engine operating conditions.
 - F. Raw data.
 - G. Opacity determinations.
 - H. Conclusions.

7.2.8 Monitoring Requirements

- a. The Permittee shall perform the following monitoring pursuant to 39.5(7)(a) and (d) and 39.5(19) of the Illinois Environmental Protection Act and 112(j) of the Clean Air Act.
- b. As part of its operation and maintenance of the affected pipeline heaters, the Permittee shall perform a "combustion evaluation" on the boiler at least every 2 years. This evaluation shall, at a minimum, consist of the following:
 - i. Inspection of the burners, assemblies, flame pattern, air-to-fuel ratio controlling systems, and other necessary components that affect combustion.
 - ii. Clean and replace any worn or failed components.
 - iii. Perform any and all adjustments necessary to optimize the system.
 - iv. Perform any and all calibrations necessary for proper functioning.
- c. Opacity

Pursuant to the opacity limitations shown in Condition 7.1.3(e), the Permittee shall conduct observations of the affected engines exhaust plume for visual emissions semiannually [39.5(7)(d) of the Act]:

- i. Visible emissions observations shall be made using Method 22 with an observation period of at least six (6) minutes.
- ii. If no visible emissions are observed, pursuant to Method 22, then it shall be recorded that the engine opacity emissions are less than 30 percent.
- iii. If visible emissions are determined during the observation of the affected engines, the Permittee is required to determine the affected engines visual opacity emissions subsequent to the Method 22 observations pursuant to Method 9 and the requirements in Condition 7.2.7.

7.2.9 Recordkeeping Requirements

- a. In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for affected pipeline indirect hearers, pursuant to Section 39.5(7)(a) and (f) of the Act:
 - i. The following records related to the tune-ups conducted on furnaces and process heaters on the lines pursuant to 40 CFR 63.7540(a)(10):
 - A. Records for each tune-up that include the following: Date and time tune-up was conducted and responsible person; Identification of the unit; Summary of inspections performed and required maintenance; Results of all calibrations performed; and CO concentrations in ppmv in the effluent stream and oxygen in volume percent, before and after the adjustments are made.
 - B. A copy of the manufacturers specifications for burners used for optimization of emissions and flame pattern during tune-ups.
 - ii. Records for emission tests, opacity observations, engineering calculations and other compliance determinations conducted for units to verify compliance with applicable standards, limitations and other requirements in Conditions 7.2.3, 7.2.6 and 7.2.7.
 - iii. Pursuant to 40 CFR 63.7555(h), if the Permittee uses an alternative fuel other than natural gas during a period of natural gas curtailment or supply interruption, the Permittee must keep records of the

total hours per calendar year that alternative fuel is burned.

- iv. The following design and operating records for indirect heaters:
 - A. A file containing the rated heat input capacity of the each affected indirect heater (mmBtu/hour), with supporting documentation.
 - B. Natural gas usage (mmscf/mo and mmscf/yr) for each indirect heater.
 - C. Emissions of each pollutant from the affected pipeline heaters with supporting calculations including documentation on the validity of the emission factors used, ton/month and ton/yr.

7.2.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall notify the Illinois EPA, Air Compliance Unit, of deviations of affected pipeline indirect heaters with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Emissions of carbon monoxide from the affected pipeline heaters in excess of the limits specified in Condition 7.2.3(c) within 30 days of such occurrence.
 - ii. Emissions of visible emission limitations from the affected pipeline heaters in excess of the limits specified in Condition 7.2.3(d) within 30 days of such occurrence.
 - iii. Emissions of sulfur dioxide from the affected pipeline heaters in excess of the limits specified in Condition 7.2.3(e) within 30 days of such occurrence.
- b. The Permittee shall notify the Illinois EPA, Air Compliance Section, of all other deviations as part of the semiannual monitoring reports required by Condition 8.6.1.
- c. All deviation reports described in Condition 7.2.10 above shall contain the following:
- i. Date, time and duration of the deviation;
 - ii. Description of the deviation;
 - iii. Probable cause of the deviation; and
- v. Any corrective action or preventive measures taken.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected pipeline heaters.

7.2.12 Compliance Procedures

- a. Compliance with Conditions 7.2.3(c) and 7.2.3(d) and 7.2.3(e) are addressed by the records and reports required in Conditions 7.2.9 and 7.2.10.

7.3 NATURAL GAS FIRED UNITS (NSPS)

7.3.1 Description

The natural gas fired units are comprised of indirect heaters to prevent hydrate formation, LNG regeneration heaters to heat regeneration gas in the CO₂ removal process, and LNG vaporizer boilers used to warm LNG prior to withdrawal from storage. These units are all natural gas fired units.

Note: his narrative description is for informational purposes only and is not enforceable.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
03	LNG Natural Gas Fired 18 mmBtu/hr Regeneration Heater	None
	South Inlet Natural Gas Fired 26.6 mmBtu/hr Indirect Heater	None
	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #1	None
	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #2	None
	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #3	None
	LNG Natural Gas Fired 67 mmBtu/hr Vaporizer Boiler #4	None
	CO ₂ Natural Gas Fired 33 mmBtu/hr Removal Regeneration Heater	None

7.3.3 Applicable Provisions and Regulations

- a. The "affected natural gas fired units" for the purpose of these unit-specific conditions, are heaters described in Conditions 7.3.1 and 7.3.2.
- b. The affected natural gas fired units are subject to the NSPS for Small Industrial-Commercial Institutional Steam Generating Units, 40 CFR 60 Subparts A and Dc, because the construction, modification, or reconstruction is commenced after June 9, 1989 and has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr). Because the affected units are gas fired there is no requirements or standard limits for any regulated pollutants.
- c. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 10 mmBtu/hr to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

- d. The affected natural gas units are subject to 40 CFR Part 63, Subpart DDDDD-National Emission Standards for Hazardous Air Pollutants (NESHAP)for Industrial, Commercial, and Institutional Boilers and Process Heaters. Because the affected pipeline heaters burn natural gas only, they considered Gas 1 Subcategory for purposes of this NESHAP.
- e. Pursuant to 35 IAC 212.123 , visible emissions limitations for all other emission units. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.
- f. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm [35 IAC 214.301].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected natural gas units are not subject to The provisions of 35 IAC 215.301 and 302, Use of Organic Material, shall not apply to fuel combustion emission sources [35 IAC 215.303].
- b. The affected natural gas fired units are not subject to 35 IAC Part 217.141, because the affected natural gas fired units have capacities of less than 250 mmBtu/hr.
- c. The affected natural gas fired units are not subject to 35 IAC Part 212.206, because the units use quality pipeline natural gas exclusively.

7.3.5 Control Requirements and Work Practices

- a. Pursuant to 40 CFR 63.7499, The affected natural gas units are Gas 1 Subcategory for the purposes of the 40 CFR Part 63, Subpart DDDDD. Beginning of the compliance date of this NESHAP, the Permittee must conduct a tune-up for each affected natural gas unit annually as specified in 40 CFR 63.7515(e).
- b. Pursuant to 39.5(7)(a), pipeline quality natural gas shall be the only fuel fired in the affected units.

7.3.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected natural gas units are subject to the following:

- a. Per construction permit # 99060062, emissions from the affected LNG Regeneration Heater shall not exceed the following limits:

<u>Pollutant</u>	<u>(Tons/Year)</u>
NO _x	11.0

CO

2.8

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

- b. Per Construction Permit #95050187, emissions from the affected CO₂ Removal Regeneration Heater shall not exceed the following limits:

<u>Pollutant</u>	<u>(Tons/Year)</u>
NO _x	12.60
CO	50.088
PM	1.67
VOM	0.71

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

- c. Per construction permit # 93010049, emissions from each of the four affected LNG Vaporizer Boilers shall not exceed the following limits:

<u>Pollutant</u>	<u>(Tons/Year)</u>
NO _x	0.82

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.3.7 Testing Requirements

- a. Pursuant to the opacity limitations shown in Condition 7.2.3(e), the Permittee shall conduct observations of the affected engines exhaust plume for visual emissions semiannually [39.5(7)(d) of the Act]:
- i. Visible emissions observations shall be made using Method 22 with an observation period of at least six (6) minutes.
 - ii. If no visible emissions are observed, pursuant to Method 22, then it shall be recorded that the engine opacity emissions are less than 30 percent.
 - iii. If visible emissions are determined during the observation of the affected engines, the Permittee is required to determine the affected engines visual opacity emissions subsequent to the Method 22 observations pursuant to Method 9.
 - iv. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:

- A. Date and time of testing.
- B. Name and employer of qualified observer.
- C. Copy of current certification.
- D. Description of observation conditions.
- E. Description of engine operating conditions.
- F. Raw data.
- G. Opacity determinations.
- H. Conclusions.

7.3.8 Monitoring Requirements

- a. The Permittee shall perform the following monitoring pursuant to 39.5(7)(a) and (d) and 39.5(19) of the Illinois Environmental Protection Act and 112(j) of the Clean Air Act.
- b. As part of its operation and maintenance of the affected natural gas units, the Permittee shall perform a "combustion evaluation" on the boiler at least every 2 years. This evaluation shall, at a minimum, consist of the following:
 - i. Inspection of the burners, assemblies, flame pattern, air-to-fuel ratio controlling systems, and other necessary components that affect combustion.
 - ii. Clean and replace any worn or failed components.
 - iii. Perform any and all adjustments necessary to optimize the system.
 - iv. Perform any and all calibrations necessary for proper functioning.
- c. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on the natural gas units in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the natural gas unit, maintenance and repair, and/or adjustment of fuel usage. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity shall be made in accordance with EPA Method 9.

7.3.9 Recordkeeping Requirements

- a. In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for affected natural gas units, pursuant to Section 39.5(7)(a) and (f) of the Act:
 - i. The following records related to the tune-ups conducted natural gas units, pursuant to 40 CFR 63.7540(a)(10):
 - A. Records for each tune-up that include the following: Date and time tune-up was conducted and responsible person; Identification of the unit; Summary of inspections performed and required maintenance; Results of all calibrations performed; and CO concentrations in ppmv in the effluent stream and oxygen in volume percent, before and after the adjustments are made.
 - B. A copy of the manufacturers specifications for burners used for optimization of emissions and flame pattern during tune-ups.
 - ii. Records for emission tests, opacity observations, engineering calculations and other compliance determinations conducted for units to verify compliance with applicable standards, limitations and other requirements in Conditions 7.3.3, 7.3.6 and 7.3.7.
 - iii. Pursuant to 40 CFR 63.7555(h), if the Permittee uses an alternative fuel other than natural gas during a period of natural gas curtailment or supply interruption, the Permittee must keep records of the total hours per calendar year that alternative fuel is burned.
 - iv. The following design and operating records for natural gas units:
 - A. A file containing the rated heat input capacity of the each affected natural gas unit (mmBtu/hour), with supporting documentation.
 - B. Natural gas usage (mmscf/mo and mmscf/yr) for each natural gas unit.
 - C. Emissions of each pollutant from the affected natural gas unit with supporting calculations including documentation on the validity of the emission factors used, ton/month and ton/yr.

7.3.10 Reporting Requirements

- a. Reporting of Deviations

The Permittee shall notify the Illinois EPA, Air Compliance Unit of deviations of affected natural gas units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Emissions of NO_x and CO from the affected LNG regenerator heater in excess of the limits specified in Condition 7.3.6 (a) within 30 days of such occurrence.
 - ii. Emissions of NO_x, CO, PM, and VOM from the affected CO₂ removal regeneration heater in excess of the limits specified in Condition 7.3.6 (b) within 30 days of such occurrence.
 - iii. Emissions of NO_x from the affected LNG vaporizer boilers in excess of the limits specified in Condition 7.3.6 (c) within 30 days of such occurrence.
- b. The Permittee shall notify the Illinois EPA, Air Compliance Section, of all other deviations as part of the semiannual monitoring reports required by Condition 8.6.1.
 - c. All deviation reports described in Condition 7.3.10 above shall contain the following:
 - i. Date, time and duration of the deviation;
 - ii. Description of the deviation;
 - iii. Probable cause of the deviation; and
 - v. Any corrective action or preventive measures taken.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected natural gas units.

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.3(c) and 7.3.3(d) is addressed by the records and reports required in Conditions 7.3.9 and 7.3.10.
- b. Compliance with Condition 7.3.6(a), 7.3.6(b), and 7.3.6(c) is addressed by the records and reports required in Conditions 7.3.9 and 7.3.10.

7.4 TEG Dehydration Units (Thermal Oxidizer Controlled)

7.4.1 Description

These triethylene glycol (TEG) dehydration units are process emission units used primarily to separate products and remove contaminants from the natural gas.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
04	Dehydrator and Glycol Reboiler #1 - 0.67 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #1
	Dehydrator and Glycol Reboiler #2 - 0.67 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #2
	Dehydrator and Glycol Reboiler #3 - 0.67 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #3
	Dehydrator and Glycol Reboiler #4 - 1.33 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #4
	Dehydrator and Glycol Reboiler #5 - 1.33 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #5
	Dehydrator and Glycol Reboiler #6 - 1.25 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #6
	Dehydrator and Glycol Reboiler #7 - 1.25 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #7
	Dehydrator and Glycol Reboiler #8 - 2.66 mmBtu/hr Natural Gas Fired	Thermal Oxidizer #8

7.4.3 Applicable Provisions and Regulations

- a. The "affected TEG dehydration units" for the purpose of these unit-specific conditions, are TEG dehydration units as described in Conditions 7.4.1 and 7.4.2.
- b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm [35 IAC 214.301].
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source.
- d. The affected dehydration units are subject to 40 CFR Part 63, Subpart DDDDD -National Emission Standards for Hazardous Air Pollutants (NESHAP)for Industrial, Commercial, and Institutional Boilers and Process Heaters. Because the

affected pipeline heaters burn natural gas only, they considered Gas 1 Subcategory for purposes of this NESHP.

e. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected TEG dehydration units in violation of the applicable standards in Condition 35 IAC 201.262 during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual starts, and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of the TEG dehydration units in accordance with written procedures prepared by the Permittee and maintained on site, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
 - A. The Permittee shall conduct startup of an affected TEG dehydration unit in accordance with the manufacturer's written instructions or other written instructions prepared by the Permittee and maintained on site.
 - B. Bringing the thermal oxidizer to manufacturer's recommended temperature but not lower than 1400° F before starting the dehydration unit.
 - C. The duration of start-up time is fixed by the maximum allowable heating rate for the refractory.
 - D. Retaining at least two dehydration unit components on-line at any given time at approximately 50% capacity each, to provide additional flexibility in the event that additional capacity is needed at short notice.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.4.9() and 7.4.10().
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to

such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

f. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of affected TEG dehydration unit in violation of the applicable standards in Condition 35 IAC 215.301 in the event of a malfunction or breakdown of the affected TEG dehydration units. This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent risk of injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practical remove the affected dehydration unit from service or repair the thermal oxidizer. This shall be accomplished within three days unless the Permittee obtains an extension, from the Regional Office of the Illinois EPA. The request for such extension must document that the thermal oxidizer is unavailable and specify a schedule of actions taken that will assure the feature(s) will be repaired or remove the affected dehydration units from services as soon as possible.
- iii. The Permittee shall reduce operation of the affected units to the extent that natural gas may reasonably be supplied from the Permittee's other storage fields.
- iv. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.4.9 and 7.4.10. For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected TEG dehydration unit out of service.

- v. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- vi. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.4.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected TEG dehydration units not being subject to the requirements of 35 IAC 212.321 or 212.322, because due to the unique nature of these units, a process weight rate cannot be set so that such rules cannot reasonably be applied.
- b. The affected dehydration units are not subject to National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR 63 Subpart HHH: Natural Gas Transmission and Storage Facilities, because the affected TEG dehydration units are located in an existing local distribution company that transmit and store natural gas.
- c. The affected TEG dehydration units are not subject to 35 IAC Part 217.141, because the affected natural gas fired units have capacities of less than 250 mmBtu/hr.

7.4.5 Control Requirements and Work Practices

- a. Per Construction Permit #94100131, pipeline quality Natural gas shall be the only fuel fired in the affected TEG dehydration units; including the supplemental fuel used in the thermal oxidizers [T1].
- b. Per Construction Permit #94100131, at all times, the Permittee shall to the extent practicable, maintain and operate the thermal oxidizers, in a manner consistent with good air pollution control practice for minimizing emissions. For this purpose control efficiency of the thermal oxidizers shall achieve at least 85 percent [T1].
- c. Per Construction Permit #94100131, upon completion of start-up and achievement of normal operation, the afterburner combustion chamber shall be preheated to the manufacturer's recommended temperature but not lower than 1,400°F, before each dehydration process is begun; this temperature shall be maintained during each dehydration process [T1].

- d. Per Construction Permit #94100131, notwithstanding 35 IAC 215.106, seasonal shutdown of each thermal oxidizer from November 1 through March 31 of the following year is not allowed [T1].

7.4.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected TEG dehydration units are subject to the following:

- a. Per Construction Permit #95070125, emissions from the affected TEG dehydration units shall not exceed the following limits:

<u>Unit</u>	<u>Pollutant</u>	<u>(Lb/Hour)</u>	<u>(Ton/Year)</u>
1	VOM	6.57	16.56
2	VOM	6.57	16.56
3	VOM	6.57	16.56
4	VOM	12.81	32.28
5	VOM	12.81	32.28
7	VOM	16.20	40.82
8	VOM	16.20	39.00
1	NO _x	0.77	1.94
2	NO _x	0.77	1.94
3	NO _x	0.77	1.94
4	NO _x	1.00	2.53
5	NO _x	1.00	2.53
7	NO _x	1.09	2.75
8	NO _x	1.23	3.10
1	CO	0.16	0.41
2	CO	0.16	0.41
3	CO	0.16	0.41
4	CO	0.21	0.30
5	CO	0.21	0.30
7	CO	0.23	0.58
8	CO	0.26	0.66
1	PM	0.093	0.24
2	PM	0.093	0.24
3	PM	0.093	0.24
4	PM	0.12	0.30
5	PM	0.12	0.30
7	PM	0.13	0.33
8	PM	0.15	0.38

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

- b. Per Construction Permit #94100131, emissions from the affected TEG dehydration unit shall not exceed the following limits:

<u>Unit</u>	<u>Pollutant</u>	<u>(Lb/Hour)</u>	<u>(Ton/Year)</u>
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6	VOM	3.60	5.44
6	NO _x	0.36	0.54

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

- c. Pursuant to Construction Permit #95070125, emissions from the affected TEG dehydration unit #8 shall not exceed 39.0 tons per year of VOM. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1N].

7.4.7 Testing Requirements

Testing requirements are not set for the affected TEG dehydration units. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.4.8 Monitoring Requirements

- a. Compliance Assurance Monitoring (CAM) Requirements

The affected TEG dehydration units are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

- i. Continued Operation [40 CFR 64.7(c)]

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the

monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- ii. Response to Excursions or Exceedances [40 CFR 64.7(d)]
 - A. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - B. Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device.
 - C. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on the dehydration units in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the natural gas unit, maintenance and repair, and/or adjustment of fuel usage. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for affected dehydration units to demonstrate compliance with Condition 5.6.1 and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas fuel usage for the affected TEG dehydration units, scf/month and scf/yr.
- b. Emissions of VOM, NO_x, CO, and PM from the affected TEG dehydration units including parameters used and pertinent supporting data as described in Condition 7.4.12, ton/mo and ton/yr.
- c. Records for Startup

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain the following recordkeeping requirements for startup procedures:

- i. A copy of the most recent startup procedures that contains at a minimum:
 - A. Estimates of excess emissions for each regulated air pollutant at startup.
 - B. Reasonable steps that will be used to minimize startup emissions, duration of individual starts, and frequency of startups.
- ii. Records for each individual startup that contains at a minimum:
 - A. Date, time, duration, and description of the startup.
 - B. Whether the most recent startup procedures were performed. If not performed, an explanation why the procedures were not performed.
 - C. Whether normal operation was achieved in the allowed duration (as referenced in Section 3 of this CAAPP permit). If not achieved, and explanation why normal operation was not achieved in the allowed duration.
 - D. An explanation of whether emissions during the startup exceeded the estimates in the startup procedures and whether emissions exceeded any applicable standard or limit not authorized to be violated during startup.
- d. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of the affected TEG

dehydration unit subject to Condition 7.4.3(f) during malfunctions and breakdown, which as a minimum, shall include:

- i. Date and duration of malfunction or breakdown.
 - ii. A detailed explanation of the malfunction or breakdown.
 - iii. An explanation why the affected TEG dehydration unit continued to operate in accordance with Condition 7.4.3(f).
 - iv. The measures used to reduce the quantity of emissions and the duration of the event.
 - v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
 - vi. The amount of release above typical emissions during malfunction/breakdown.
- e. Records for Compliance Assurance Monitoring (CAM) Requirements

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.4.8(a), as required by 40 CFR 64.9(b)(1).

7.4.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall notify the Illinois EPA, Air Compliance Unit, of deviations of affected TEG dehydration units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Emissions and operation of TEG dehydration units from the affected in excess of the limits specified in Conditions 7.4.3, 7.4.5, and 7.4.6 within 30 days of such occurrence.

b. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

- i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective

actions taken [40 CFR 64.6(c)(3) and 64.9(a)(2)(i)];
and

- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks [40 CFR 64.6(c)(3) and 64.9(a)(2)(ii)].

c. Reporting of Malfunctions and Breakdowns

Pursuant to Sections 39.5(7)(b) and (f) of the Act and 35 IAC 201.263, the source shall provide the following notification and reports to the IEPA, Compliance Section and Regional Field Office concerning continued operation in violation of the applicable requirements during malfunction or breakdown:

i. Prompt Reporting

When the granted duration is exceeded (as referenced in condition 7.4.3(f) of the CAAPP permit) or continued operation in violation of the applicable requirements during malfunction or breakdown:

- A. The source shall notify the IEPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.
- B. Upon achievement of compliance, the source shall give a written follow-up notice within 15 days to the IEPA, Air Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the source to minimize and correct deficiencies with chronology, and when the repairs were completed or when the unit(s) was taken out of service.
- C. If compliance is not achieved within 5 working days of the occurrence, the source shall submit interim status reports to the IEPA, Air Compliance Section and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the emission unit(s) will be taken out of service.

ii. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a semiannual malfunction breakdown report including the following at a minimum:

- A. A listing of all malfunctions and breakdowns, in chronological order, that includes: the date, time, and duration of each incident; and identity of the affected operation(s) involved in the incident.
- B. Dates of the notices and reports required by Prompt Reporting requirements of 3(A) above.
- C. The aggregate duration of all incidents during the reporting period.
- D. If there have been no such incidents during the reporting period, this shall be stated in the report.

d. Reporting of Startups

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the source shall submit the following reporting requirements:

i. Prompt Reporting

A Deviation Report shall be submitted to the IEPA, within five (5) days if a startup exceeded the emission estimates in the startup procedures or emissions exceeded any applicable standard or limit not authorized to be violated during startup.

ii. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a startup report including the following at a minimum: a list of the startups including the date, duration, and description of each startup accompanied by any explanations whether the most recent startup procedures were or were not performed and whether normal operation was or was not achieved in the allowed duration.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected TEG dehydration units.

7.4.12 Compliance Procedures

- a. Compliance with condition 7.4.3(b),(c),and (d) is demonstrated by the following requirements:

- i. Pursuant to Section 39.5(7)(a) of the Act, pipeline quality natural gas shall be the only fuel fired in the affected TEG dehydration units.
 - ii. Pursuant to Sections 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform monthly inspections of the TEG dehydration units and associated auxiliary equipment.
 - iii. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment being inspected, findings of the inspections, operation and maintenance procedures, and a description of any maintenance and repair activities that resulted in a modification or reconstruction of the piece of equipment.
- b. Compliance with the emission limits in Conditions 5.6 and 7.4.6 shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:
- i. For purposes of calculating VOM emissions, the current version of the GRI-GLYCalc¹ estimated air emissions program or other comparable emission determination method is acceptable. The minimum control efficiency of the thermal oxidizer is assumed to be 85% efficient.

* 1 - GRI-GLYCalc model was developed by Radian Corporation for the Gas Research Institute (GRI) specifically for estimating BETX/VOM emissions from TEG and ethylene glycol dehydration units.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after February 23, 2012 (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;

- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of

such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);

- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
 - i. Illinois EPA - Air Compliance Unit

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency
Bureau of Air
Air Quality Planning Section (MC 39)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
 - iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
 - ii. As otherwise authorized by the CAA, or the Act.

- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any regulated activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee

that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this

permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit.
- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the

Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].

- i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and
 E = Allowable emission rate; and,

A. Up to process weight rates of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

B. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8
B	0.16	0.16

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric P <u>Mg/hr</u>	E <u>kg/hr</u>	English P <u>T/hr</u>	E <u>lb/hr</u>
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

iv. For process weight rates of less than 100 pounds per hour, the allowable rate is 0.5 pounds per hour [35 IAC 266.110].

b. Existing Process Emission Units for Which Construction or Modification Prior to April 14, 1972 [35 IAC 212.322].

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].

ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

A. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

B. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

iii. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
<u>P</u>	<u>E</u>	<u>P</u>	<u>E</u>
<u>Mg/hr</u>	<u>kg/hr</u>	<u>T/hr</u>	<u>lb/hr</u>
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

iv. For process weight rates of less than 100 pounds per hour, the allowable rate is 0.5 pounds per hour [35 IAC 266.110].

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

Table 3.	PSEU Designation:	Dehydrator and Glycol Reboiler Units 1 through 8
Significant Emission Unit Section:		7.4
Pollutant:		VOM

Indicators:	#1: Combustion chamber temperature	#2: Position of the bypass valve
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GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Each thermal oxidizer is equipped with a continuous temperature indicator display and continuous circular chart recorder or data logger which monitors the combustion chamber temperature	The bypass valve position is also tracked via circular chart or data logger. The frequency of readings tracked is one (1) reading per operating minute.
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	Minimum operating temperature 1400°F Maximum operating temperature 1800°F	Valve position: open/closed
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	Repairs of any malfunctioning unit as soon as practicable	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The recorded oxidizer temperature indicates that the device is attaining the requisite destruction/removal efficiency (DRE)	The valve position indicates that VOM emissions are being directed to the device.
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	Each oxidizer is equipped with dual thermocouples to ensure data accuracy for each system. All the thermocouples are calibrated annually per manufacturer's specifications.	N/A

<p>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:</p>	<p>Operators monitor indicators during normal operations including visual alarms on both the oxidizer temperature and the exhaust flow parameters. The data is reviewed by technicians at least once per week.</p>	<p>N/A</p>
<p>THE MONITORING FREQUENCY:</p>	<p>Continuously</p>	<p>For the bypass valve One reading per operating minute</p>
<p>THE DATA COLLECTION PROCEDURES THAT WILL BE USED:</p>	<p>Continuous temperature indicator display and continuous circular chart recorder</p>	<p>Circular chart or data logger</p>
<p>THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:</p>	<p>N/A</p>	<p>N/A</p>

Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

www.epa.state.il.us/air/caapp/199-caapp.pdf

www.epa.state.il.us/air/permits/197-fee.pdf

MA:psj