217/782-2113

REVISED
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

Morris Cogeneration, LLC
Attn: Hiroshi Sakuma
8805 North Tabler Road
Morris, Illinois 60450

Application No.: 99110011 I.D. No.: 063800AAJ
Applicant's Designation: Date Received: November 1, 1999
Operation of: Electric and Steam Generation
Date Issued: November 24, 2003 Expiration Date[2]: November 24, 2008
Source Location: 8805 North Tabler Road, Morris, Grundy, IL 60450
Responsible Official: Hiroshi Sakuma/President

This permit is hereby granted to the above-designated Permittee to OPERATE an electric power generation and steam plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: March 24, 2004
Revision Date Issued: August 16, 2006
Type of Revision: Minor Modification

This minor modification includes the following changes:

Several conditions in Sections 6.1 and 7.2 have been revised to recognize that Boilers 5 and 6 are subject to the control requirement of the NO_x Control and Trading Program, 35 IAC Part 217, Subpart U and to remove limits and other provisions previously included in the permit to establish low-mass emitter status.

Conditions 7.2.5 and 7.2.6 have been revised to add limitations established in Construction Permit 04070045 for Boiler 6.

Other changes have been made for clarity or to update the permit. Condition 7.2.6 is revised deleting source-wide emission limits, as the source-wide emission limits is already present in Condition 5.5.3. Condition 5.5.3 is revised to clarify it further.

The Responsible Official and ORIS code number in Section 1.1 have been updated. To address ownership/name change of the facility, Conditions 5.1.2, 6.2, 7.1.11, 7.2.11, and 7.3.11 have been updated.

This document only contains those portions of the CAAPP permit that have been revised as a result of this permitting action. If a conflict exists between this document and the previous version of the CAAPP permit, this document supersedes those terms and conditions of the permit for which the conflict exists.

Please attach a copy of this revision to the front of the most recently issued entire permit.

If you have any questions concerning this permit, please contact Manish Patel at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RWC:MNP:psj

cc: Illinois EPA, FOS, Region 1
USEPA

[1] This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 – federal PSD and 35 IAC Part 203 – Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

[2] Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Morris Cogeneration, LLC
8805 North Tabler Road
Morris, Illinois 60450
815/941-0765

I.D. No.: 063800AAJ
ORIS Code No.: 55216

Standard Industrial Classification: 4931, Electric and Other Services Combined

1.2 Owner/Parent Company

Morris Cogeneration, LLC
333 South Grand Avenue Suite 157y0
Los Angeles, California 90071

1.3 Operator

DGC Operations, LLC
333 South Grand Avenue, Suite 1570
Los Angeles, California 90071

Audun Aeberg/Vice President-Operations & Maintenance
612/745-3343

1.4 General Source Description

Morris Cogeneration, LLC is located at 8805 North Tabler Road, Morris. The source is consisting of cogeneration plant (includes three natural gas fired turbines with three heat recovery steam generators and cooling towers) to generate electricity, and five boilers to generate process steam used at the neighboring source operated by Equistar Chemicals.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

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
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
hr	hour
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
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
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
ppm	parts per million
PSD	Prevention of Significant Deterioration
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 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:

None

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:

None

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:

None

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

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 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182.

3.2.2 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. 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.

3.2.3 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 218.182, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify

as photochemically reactive material as defined in 35 IAC 211.4690.

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).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
CTG1	43,520 KW Natural or Commercial Gas Fired Turbine (457 mmBtu/hr)	July 1997	Dry Low NO_x Controls
HRSG 1	Natural or Commercial Gas Fired HRSG (260 mmBtu/hr)	July 1997	None
CTG2	43,520 KW Natural or Commercial Gas Fired Turbine (457 mmBtu/hr)	July 1997	Dry Low NO_x Controls
HRSG 2	Natural or Commercial Gas Fired HRSG (260 mmBtu/hr)	July 1997	None
CTG3	43,520 KW Natural or Commercial Gas Fired Turbine (457 mmBtu/hr)	July 1997	Dry Low NO_x Controls
HRSG 3	Natural or Commercial Gas Fired HRSG (260 mmBtu/hr)	July 1997	None
Boiler 5	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	1976	None
Boiler 6	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	1976	None
Boiler 1	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	1968	None
Boiler 2	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	1969	None
Boiler 3	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	1970	None
TCT	Turbine Cooling Towers	July 1997	None
CT	Chiller Cooling Towers	July 1997	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of CO, NO_x, PM, SO_2, VOM and HAP emissions.

5.1.2 For purposes of the CAAPP, this source, i.e., the cogeneration and boiler plant, is part of a larger source that also includes Equistar Chemicals LP, I.D. No. 063800AAC, also located at 8805 North Tabler Road, Morris. The Permittees have elected to obtain separate CAAPP permits for their respective sources.

5.2 Applicable Regulations

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

5.2.2 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.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

b. 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, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 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.

5.2.4 Risk Management Plan

Should this stationary source pursuant to 40 CFR 68.215(a)(2)(i) and (ii), as defined in 40 CFR 68.3, become subject to the federal rules for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit:

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 applicable 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.

5.2.5 a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, 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.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B that was promulgated after the date issued of this permit.

c. This stationary source will be subject to 40 CFR Part 63 when such rule becomes final and effective. The

Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8 beginning in the year that compliance is required under a final and effective rule.

5.2.6 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section.

5.3 Non-Applicability of Regulations of Concern

5.3.1 This permit is issued based on the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the source does not have a pollutant-specific emissions unit that uses an add-on control device to achieve compliance with an emission limitation or standard.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 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 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	8.0
Sulfur Dioxide (SO_2)	40.5
Particulate Matter (PM)	22.4
Nitrogen Oxides (NO_x)	369.0
HAP, not included in VOM or PM	----
Total	439.9

5.5.2 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.

5.5.3 Other Source-Wide Emission Limitations

The annual emissions from the cogeneration plant (three turbines with Heat Recovery Steam Generators and cooling towers) and five Boilers 1, 2, 3, 5, and 6 shall not exceed the following limitations:

Pollutant	Emissions (Tons/Year)
NO_x	369.00
CO	199.00
SO_2	40.50
VOM	8.00
PM	22.40

The limitations on NO_x, CO, SO_2, VOM, and PM are limitations established in Permits 00040096, 96120050, and 99030108, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The PM limit is the combined limit for both the cooling towers and the turbines including the new air chillers and cooling tower associated with the turbine generator permitted under construction permit 99030108. These limits ensure that

the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. These limits are applicable to the Cogeneration Plant and the existing utility boilers (Boilers 1, 2, 3, 5, and 6) combined, and assure that the net contemporaneous changes in emissions and the new potential do not trigger Prevention of Significant Deterioration (PSD).

Compliance with annual limits shall be determined from a running total of 12 months of data i.e., from the sum of the data for the current month plus the preceding 11 months (12 months total).

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.4 Records for HAP Emissions

Records of HAP emissions for the emission units are covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.5 Records for Operating Scenarios

N/A

5.6.6 Retention and Availability of Records

a. 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. 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.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the source 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.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information, so as to demonstrate whether the source is being operated as a non-major source of HAP emissions. This report shall be submitted with the Annual Emissions Report (Condition 9.7).

a. The annual emissions of individual HAPs for each month of the previous calendar year, tons/year (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all); and

b. The total emissions of all HAPs combined for each month of the previous calendar year, tons/year (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all).

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 EMISSIONS CONTROL PROGRAMS

6.1 NO_x Trading Program

6.1.1 Description of NO_x Trading Program

The NO_x Trading Program is a regional "cap and trade" market system for large sources of NO_x emissions in the eastern United States, including Illinois. It is designed to reduce and maintain NO_x emissions from the emission units covered by the program within a budget to help contribute to attainment and maintenance of the ozone ambient air quality standard in the multi-state region covered by the program. The NO_x Trading Program applies in addition to other applicable requirements for NO_x emissions and in no way relaxes these other requirements.

Emission units that are subject to the NO_x Trading Program are referred to as "budget units." Sources that have one or more budget unit subject to the NO_x Trading Program are referred to as budget sources.

The NO_x Trading Program controls NO_x emissions from budget units during a seasonal control period from May 1 through September 30 of each year, when weather conditions are conducive to formation of ozone in the ambient air. (In 2004, the first year that the NO_x Trading Program is in effect, the control period will be May 31 through September 30.) By November 30 of each year, the allowance transfer deadline, each budget source must hold "NO_x allowances" for the actual NO_x emissions of its budget units during the preceding control period. The USEPA will then retire NO_x allowances in the source's accounts in amounts equivalent to its seasonal emissions. If a source does not have sufficient allowances in its accounts, USEPA would subtract allowances from the source's future allocation for the next control period and impose other penalties as appropriate. Stringent monitoring procedures developed by USEPA apply to budget units to assure that actual emissions of NO_x emissions are accurately determined.

The number of NO_x allowances available for budget sources is set by the overall budget for NO_x emissions established by USEPA. This budget requires a substantial reduction in NO_x emissions from historical levels as necessary to meet air quality goals. In Illinois, separate rules have been established for the budget units that are electrical generating units (EGU) and for large units at manufacturing plants and institutions (non EGU), like the boilers and turbines at this source. Under these rules, the allocation or share of the NO_x allowances for existing non-EGU is set in an amount established by rule [35 IAC

Part 217, Appendix E]. New budget units such as the turbines at this source do not have an allocation.

In addition to directly receiving or purchasing NO_x allowances as described above, budget sources may transfer NO_x allowances from one of their units to another. They may also purchase allowances in the marketplace from other sources that are willing to sell some of the allowances that they have received. Each budget source must designate an account representative to handle all its allowance transactions. The USEPA, in a central national system, will maintain allowance accounts and record transfer of allowances among accounts.

The ability of sources to transfer allowances will serve to minimize the costs of reducing NO_x emissions from budget units to comply with the overall NO_x budget. In particular, the NO_x emissions of budget units that may be most economically controlled will be targeted by sources for further control of emissions. This will result in a surplus of NO_x allowances from those units that can be transferred to other units at which it is more difficult to control NO_x emissions. Experience with reduction of sulfur dioxide emissions under the federal Acid Rain program has shown that this type of trading program not only achieves regional emission reductions in a more cost-effective manner but also results in greater overall reductions than application of traditional emission standards to individual emission units.

The USEPA developed the plan for the NO_x Trading Program with assistance from affected states. Illinois' rules for the NO_x Trading Program are located at 35 IAC Part 217, Subpart U and W, for non-EGUs and EGUs, respectively. These rules have been approved by the USEPA. These rules provide for interstate trading, as mandated by Section 9.9 of the Act. Accordingly, these rules refer to and rely upon federal rules at 40 CFR Part 96, which have been developed by USEPA for certain aspects of the NO_x Trading Program, and which an individual state must follow to allow for interstate trading of allowances.

Note: This narrative description of the NO_x Trading Program is for informational purposes only and is not enforceable.

6.1.2 Applicability

a. The following emission units are budget units for purposes of Illinois' NO_x Trading Program. Accordingly, this source is a budget source and the Permittee is the owner or operator of a budget source and budget units. In this section of this permit, these emission units are addressed as budget units.

(i) New budget units:

Turbine Unit 1 (CTG1 & HRSG1)
Turbine Unit 2 (CTG2 & HRSG2)
Turbine Unit 3 (CTG3 & HRSG3)

(ii) Existing budget units:

Boiler #5
Boiler #6

b. This Permit does not provide "low-emitter status" for the above emission units pursuant to 35 IAC 217.472.

6.1.3 General Provisions of the NO_x Trading Program

a. This source and the budget units at this source shall comply with all applicable requirements of Illinois' NO_x Trading Program, i.e., 35 IAC Part 217, Subpart U, and 40 CFR Part 96 (excluding 40 CFR 96.4(b) and 96.55(c), and excluding 40 CFR 96, Subparts C, E and I), pursuant to 35 IAC 217.456(a) and 217.456(f)(2).

b. Any provision of the NO_x Trading Program that applies to a budget source (including any provision applicable to the account representative of a budget source) shall also apply to the owner and operator of such budget sources and to the owner and operator of each budget unit at the source, pursuant to 35 IAC 217.456(f)(3).

c. Any provision of the NO_x Trading Program that applies to a budget unit (including any provision applicable to the account representative of a budget unit) shall also apply to the owner and operator of such budget unit. Except with regard to requirements applicable to budget units with a common stack under 40 CFR 96, Subpart H, the owner and operator and the account representative of one budget unit shall not be liable for any violation by any other budget unit of which they are not an owner or operator or the account representative, pursuant to 35 IAC 217.456(f)(4).

6.1.4 Requirements for NO_x Allowances

a. Beginning in 2004, by November 30 of each year, the allowance transfer deadline, the account representative of each budget unit at this source must hold allowances available for compliance deductions under 40 CFR 96.54 in the budget unit's compliance account or the source's overdraft account

in an amount that shall not be less than the budget unit's total NO_x emissions for the preceding control period (rounded to the nearest whole ton), as determined in accordance with applicable monitoring requirements, plus any number of allowances necessary to account for actual utilization (e.g., for testing, start-up, malfunction, and shut down) under 40 CFR 96.42(e) for the control period, pursuant to 35 IAC 217.456(d)(1). For purposes of this requirement, an allowance may not be utilized for a control period in a year prior to the year for which the allowance is allocated, pursuant to 35 IAC 217.456(d)(4).

b. The account representative of a budget unit that has excess emissions in any control period, i.e., NO_x emissions in excess of the number of NO_x allowances held as provided above, shall surrender allowances as required for deduction under 40 CFR 96.54(d)(1), pursuant to 35 IAC 217.456(f)(5). In addition, the owner or operator of a budget unit that has excess emissions shall pay any fine, penalty, or assessment, or comply with any other remedy imposed under 40 CFR 96.54(d)(3) and the Act, pursuant to 35 IAC 217.456(f)(6). Each ton of NO_x emitted in excess of the number of NO_x allowances held as provided above for each budget unit for each control period shall constitute a separate violation of 35 IAC Part 217 and the Act, pursuant to 35 IAC 217.456(d)(3).

c. An allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program is a limited authorization to emit one ton of NO_x in accordance with the NO_x Trading Program. As explained by 35 IAC 217.456(d)(5), no provisions of the NO_x Trading Program, the budget permit application, the budget permit, or a retired unit exemption under 40 CFR 96.5 and no provision of law shall be construed to limit the authority of the United States or the State of Illinois to terminate or limit this authorization. As further explained by 35 IAC 217.456(d)(6), an allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program does not constitute a property right. As provided by 35 IAC 217.456(d)(2), allowances shall be held in, deducted from, or transferred among allowances accounts in accordance with 35 IAC Part 217, Subpart U, and 40 CFR 96, Subparts F and G.

6.1.5 Monitoring Requirements for Budget Units

a. The Permittee shall comply with the monitoring requirements of 40 CFR Part 96, Subpart H, for each budget unit and the compliance of each budget unit with the emission limitation under Condition 6.1.4(a)

shall be determined by the emission measurements recorded and reported in accordance with 40 CFR 96, Subpart H, pursuant to 35 IAC 217.456(c)(1) and (c)(2).

b. The account representative for the source and the budget units at the source shall comply with those sections of the monitoring requirements of 40 CFR 96, Subpart H, applicable to an account representative, pursuant to 35 IAC 217.456(c)(1).

Note: Pursuant to 40 CFR 96.70(b), new budget units that commence operation before January 1, 2003 and existing budget units were to begin complying with applicable monitoring requirements of 40 CFR Part 96 at least one year in advance of the start of the first control period governed by the NO_x Trading Program.

6.1.6 Recordkeeping Requirements for Budget Units

Unless otherwise provided below, the Permittee shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This 5-year period may be extended for cause at any time prior to the end of the 5 years, in writing by the Illinois EPA or the USEPA.

a. The account certificate of representation of the account representative for the source and each budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 40 CFR 96.13, as provided by 35 IAC 217.456(e)(1)(A). These certificates and documents must be retained on site at the source for at least 5-years after they are superseded because of the submission of a new account certificate of representation changing the account representative.

b. All emissions monitoring information, in accordance with 40 CFR 96, Subpart H, (provided that to the extent that 40 CFR 96, Subpart H, provides for a 3-year period for retaining records, the 3-year period shall apply), pursuant to 35 IAC 217.456(e)(1)(B).

c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Trading Program or documents necessary to demonstrate compliance with requirements of the NO_x Trading Program, pursuant to 35 IAC 217.456(e)(1)(C).

d. Copies of all documents used to complete a budget permit application and any other submission under the

NO_x Trading Program, pursuant to 35 IAC 217.456(e)(1)(D).

6.1.7 Reporting Requirements for Budget Units

a. The account representative for this source and each budget unit at this source shall submit to the Illinois EPA and USEPA the reports and compliance certifications required under the NO_x Trading Program, including those under 40 CFR 96, Subparts D and H, and 35 IAC 217.474, pursuant to 35 IAC 217.456(e)(2).

b. Notwithstanding the provisions for CAAPP permits, these submittals need only be signed by the designated representative, who may serve in place of the responsible official for this purpose, as provided by Section 39.5(1) of the Act, and submittals to the Illinois EPA need only be made to the Illinois EPA, Air Compliance Section.

6.1.8 Allocation of NO_x Allowances to Budget Units

a. As the budget units identified in Condition 6.1.2(a)(i), i.e., Turbine Unit 1, Turbine Unit 2, and Turbine Unit 3, are "new" units and are not listed in 35 IAC Part 217, Appendix E, these units are not entitled to an allocation of NO_x allowances pursuant to 35 IAC 217.462 and 217.466(a).

b. i. As the budget units identified in Condition 6.1.2(a)(ii), i.e., Boiler #5 and Boiler #6, are "existing" units listed in 35 IAC Part 217, Appendix E, these units are entitled to NO_x allowances as specified by Appendix E, subject to transfers of allowances from the source made in accordance with 35 IAC 217.462(b). (The portion of Appendix E that applies to the Permittee is provided in Condition 6.1.10.) The number of NO_x allowances actually allocated for these budget units shall be the number of NO_x allowances allocated by the Illinois EPA in accordance with 35 IAC 217.466(a) and issued by USEPA, which may reflect adjustments to the overall allocations to budget units as provided for by 35 IAC 217.460 and 217.462(c).

ii. To the extent that NO_x allowances remain in the NSSA after any allocation for new budget units, the Permittee is also entitled to a pro-rata share of such remaining allowances as provided by 35 IAC 217.466(d).

6.1.9 Budget Permit Required by the NO_x Trading Program

a. For this source, this segment of the CAAPP Permit, i.e., Section 6.1, is the Budget Permit required by the NO_x Trading Program and is intended to contain federally enforceable conditions addressing all applicable NO_x Trading Program requirements. This Budget Permit shall be treated as a complete and segregable portion of the source's permit, as provided by 35 IAC 217.458(a)(2).

b. The Permittee and any other owner or operator of this source and each budget unit at the source shall operate the budget units in compliance with this Budget Permit, pursuant to 35 IAC 217.456(b)(2).

c. No provision of this Budget Permit or the associated application shall be construed as exempting or excluding the Permittee, or other owner or operator and, to the extent applicable, the account representative of a budget source or budget unit from compliance with any other regulation or requirement promulgated under the CAA, the Act, the approved State Implementation Plan, or other federally enforceable permit, pursuant to 35 IAC 217.456(g).

d. Upon recordation by USEPA under 40 CFR 96, Subpart F or G, every allocation, transfer, or deduction of an allowance to or from the budget units' compliance accounts or to or from the source's general or overdraft account is deemed to amend automatically and become part of this budget permit, pursuant to 35 IAC 217.456(d)(7). This automatic amendment of this budget permit shall be deemed an operation of law and will not require any further review.

e. No revision of this Budget Permit shall excuse any violation of the requirements of the NO_x Trading Program that occurs prior to the date that the revision to this permit takes effect, pursuant to 35 IAC 217.456(f)(1).

f. The Permittee, or other owner or operator of the source, shall reapply for a Budget Permit for the source as required by 35 IAC Part 217, Subpart U and Section 39.5 of the Act. For purposes of the NO_x Trading Program, the application shall contain the information specified by 35 IAC 217.458(b)(2).

6.1.10 References

35 IAC Part 217 Appendix E - (provisions applicable to the Permittee)

Company I.D. No./ Name	Unit Designation	Unit Description	Budget Allocation	Budget Allocation Less 3% NSSA
063800AAC	72100016013	Boiler #1	40	39
063800AAC	72100016013	Boiler #2	40	39
063800AAC	72100016014	Boiler #3	40	39
063800AAC	72100016016	Boiler #5	40	39
063800AAC	72100016017	Boiler #6	40	38
	Company Total Allocation:		200	194

6.2 Emissions Reduction Market System (ERMS)

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

As previously discussed in Condition 5.1.2, this source and the co-located source operated by Equistar Chemicals LP (I.D. No. 063800AAC) are a single large source. Currently Equistar is holding and retiring ATUs for the VOM emissions of both sources in accordance with Equistar’s CAAPP Permit, 96010018, Condition 6.8. If Equistar were not to address both sources, the Permittee would have to hold and retire ATUs for the VOM emissions from the source addressed by the permit.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Turbines (Subject to NSPS - 40 CFR Subpart GG) and Heat Recovery Steam Generators (HRSG) (Subject to NSPS - 40 CFR Subpart Db)

7.1.1 Description

The turbines are process emission units, and the HRSG are fuel combustion emission units exhausted through a common stack, and are used to generate electricity. The turbine and HRSG are powered by natural gas or commercial grade fuel (i.e., methane off-gas produced as a by-product in the associated manufacturing facility).

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
CTG1	43,520 KW Natural or Commercial Gas Fired Turbine (457 mmBtu/hr)	Dry Low NO_x Controls
HRSG 1	Natural or Commercial Gas Fired HSRG (260 mmBtu/hr)	None
CTG2	43,520 KW Natural or Commercial Gas Fired Turbine (457 mmBtu/hr)	Dry Low NO_x Controls
HRSG 2	Natural or Commercial Gas Fired HSRG (260 mmBtu/hr)	None
CTG3	43,520 KW Natural or Commercial Gas Fired Turbine (457 mmBtu/hr)	Dry Low NO_x Controls
HRSG 3	Natural or Commercial Gas Fired HSRG (260 mmBtu/hr)	None

7.1.3 Applicability Provisions and Applicable Regulations

a. i. An “affected turbine” for the purpose of these unit-specific conditions, is a turbine described in Conditions 7.1.1 and 7.1.2.

ii. An “affected HRSG” for the purpose of these unit-specific conditions, is a HRSG described in Conditions 7.1.1 and 7.1.2.

b. The affected turbines and affected HRSGs are subject to the emission limits identified in Condition 5.2.2.

c. i. The affected turbines are subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subparts A and GG, because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour (10 mmBtu/hr), based on the lower heating value of the fuel fired and

the affected turbines commenced construction, modification, or reconstruction after October 3, 1977. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

A. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.332(b), electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of 40 CFR 60.332(a)(1). Pursuant to 40 CFR 60.332(a)(1), no owner or operator of an affected turbine shall cause to be discharged into the atmosphere from such gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

Where:

STD = Allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = Manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen calculated from the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NO_x percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04 (N)
$0.1 < N \leq 0.25$	0.04 + 0.0067(N - 0.1)
$N > 0.25$	0.005

Where:

N = The nitrogen content of the fuel (percent by weight) determined in according with Condition 7.1.8.

B. Standard for Sulfur Dioxide

I. No owner or operator of an affected turbine shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis [40 CFR 60.333(a)].

II. No owner or operator of an affected turbine shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)].

ii. The affected HRSGs are subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subparts A and Db, because the construction, modification, or reconstruction is commenced after June 19, 1984 and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million Btu per hour). The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA. The Permittee must comply with 40 CFR 60.49, which is addressed in Condition 7.1.9.

A. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.44(b)(4), no owner or operator of an affected HSRG shall cause to be discharged into the atmosphere from that affected HSRG any gases that contain nitrogen oxides (expressed as NO2) in excess of 0.2 lb/mmBtu.

d. i. 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. 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].

f. No person shall cause or allow the emission of nitrogen oxides (NO_x) into the atmosphere in any one hour period from any new fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mmBtu/hr) to exceed the following standards and limitations:

i. For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mmBtu) of actual heat input [35 IAC 217.121(a)].

Note: These provisions are not intended to prevent the Illinois EPA from developing streamlined approaches for compliance of the affected turbines and affected HRSGs, which function in series with the exhaust through the each affected HRSG, with Subpart GG and Db of the NSPS respectively.

g. Startup Provisions

The Permittee is authorized to operate an affected turbine and/or affected HRSG in violation of the applicable standards in Condition 5.2.2(b) (35 IAC 212.123(a)) and the hourly limits of Conditions 7.1.6 during startup subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262, as the Permittee has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual starts, and frequency of startups. This authorization is subject to the following:

i. This authorization only extends for a period of up to 2-hours following initial firing of fuel for each startup event.

ii. The Permittee shall take the following measures to minimize emissions resulting from startups, the duration of startups, and minimize the frequency of startups:

A. Operating in accordance with the manufacturer’s written operating and startup procedures, including a pre-check of the unit, or other written procedures developed and maintained by the Permittee so as to minimize the duration of startups and the emissions associated with startups. These procedures should allow for review of operating parameters

of the unit during startup, or shutdown as necessary to make adjustments to reduce or eliminate excess emissions.

B. Maintaining units in accordance with written procedures developed and maintained by the Permittee so as to minimize the duration of startups and the frequency of startups. These maintenance practices shall include maintenance activities before the unit is started up, when the unit is in operation, and when the unit is shut down.

C. The procedures described above shall be reviewed at least annually to make necessary adjustments and shall be made available to the Illinois EPA upon request.

iii. The Permittee shall fulfill applicable recordkeeping requirements of Condition 7.1.9(j).

h. Malfunction and Breakdown Provisions

In the event of a malfunction or breakdown of an affected turbine and/or affected HRSG, the Permittee is authorized to continue operation of the affected turbine and/or affected HRSG in violation of the applicable requirement of Condition 5.2.2(b) (35 IAC 212.123(a)) and the hourly limits of Conditions 7.1.6, as necessary to provide essential service, i.e. prevent interruption in or shortage of the public's electricity supply, provided that operation shall not be continued solely for the economic benefit of the Permittee or to prevent risk of injury to personnel or severe damage to equipment. This authorization is subject to the following requirements:

i. The Permittee shall repair the damaged feature(s) of the affected turbine and/or affected HRSG or remove the affected turbine and/or affected HRSG from service as soon as practicable.

ii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.1.9(k) and 7.1.10(c).

7.1.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on an affected turbine not being subject to the requirements of 35 IAC 212.321 or 212.322, because due to the unique nature of such unit, a process weight rate can not be set so that such rules can not reasonably be applied.

b. An affected turbine is not subject to 35 IAC 217.141, because an affected turbine is not by definition a fuel combustion unit.

c. An affected turbine is not subject to 35 IAC 216.121, because an affected turbine is not by definition a fuel combustion unit.

d. The provisions of 35 IAC 218.301 and 302, Use of Organic Material, shall not apply to fuel combustion emission sources [35 IAC 218.303].

e. The control requirements of 35 IAC 218 Subpart TT shall not apply to fuel combustion units [35 IAC 218.980(f)].

f. The affected turbines and affected HRSGs are not subject to the requirements of the NO_x Compliance Programs of 35 IAC Part 217 because the affected turbines and HRSGs are located at a source that is listed in 35 IAC Part 217, Appendix D.

g. Pursuant to 40 CFR 72.6(b)(4)(i), cogeneration plants that will not be selling one third, or more, of its potential electrical output or more than 219,000 Mwe-hours actual electric output on an annual basis is not subject to the requirements of the Acid Rain Program.

h. This permit is issued based on the affected turbines and affected HRSGs not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected HRSGs does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected turbine and affected HRSG in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the

Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

b. Both natural gas and commercial grade fuel (i.e., methane off-gas produced as a by-product in the associated manufacturing facility) may be fired in each affected turbine and affected HRSG.

c. Total electrical power output from each affected turbine operating at site conditions of 20°F and 45% relative humidity shall not exceed 44 MW_{gross} (total gross electrical power output 132 MW_{gross} for the three affected turbines).

d. The Permittee is not subject to hourly limitations of Condition 7.1.6(a) during transient periods consisting of Startup, Shutdown, and Peak Firing for the affected turbines and affected HRSGs as described in the application. The following limitations and restrictions apply during each transient period:

   i. Start-Ups: Each cold start (when steam drum temp. < 200°F) for each affected turbine shall not exceed 360 minutes. Each warm start (when steam drum temp. > = 200°F) shall not exceed 120 minutes for each affected turbine.

   ii. Shutdowns: Each planned shutdown for each affected turbine shall not exceed 60 minutes. In the event of unplanned shutdowns due to electrical fault, trip, or other malfunction the fuel flow shall be immediately interrupted to the malfunctioning unit.

   iii. Peak Firing: Peak firing of any affected turbine unit shall not exceed 120 minutes when additional demand is temporarily needed in the event of a malfunction and subsequent shutdown of another affected turbine unit. Peak firing of any affected turbine unit to meet electrical demand for any other reason shall not exceed 8 consecutive hours.

e. The nominal steam production rate of each affected HRSG is 360,000 lbs of steam produced per hour. The maximum heat input rate to each HRSG shall not exceed 271 mmBtu/hr (LHV).

f. The Permittee shall operate the cogeneration plant and existing utility boilers such that the combined emissions from existing utility boilers and the

cogeneration plant do not exceed the limits in 5.5.3 of this permit. The limits in 5.5.3 apply at all times, including periods of operation of existing boilers in "Normal Mode" and transient periods of the affected turbines and affected HRSGs as allowed by Condition 7.1.5(d).

g. Compliance with annual limitations 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). The above limitation was established in Permit 00040096 [T1].

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected turbines and affected HRSGs are subject to the following:

a. Emissions from the affected turbines and HRSGs shall not exceed the following limits: Except for periods of transient conditions as allowed in Condition 7.1.5(d), emissions and operation of each affected turbine and each affected HRSG shall not exceed the following limits:

Pollutant	Emission Limits For Each Turbine (Lb/Hour)	Emission Limits For Each HRSG (Lb/Hour)
NO_x	46.0	30.0
CO	24.0	30.0
SO_2	2.3	2.4
VOM	2.3	3.0
PM	5.5	1.4

These limits are based on information provided in the permit application and are subject to change pending Illinois EPA review of the stack test report as required by this permit.

b. 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. The above limitations were established in Permits 00040096 and 96120050, pursuant to PSD, 40 CFR 52.21. These limitations ensure that the construction and/or modification addressed in these permit(s) does not constitute a major modification pursuant to Title I of the CAA, specifically the federal PSD rules [T1].

7.1.7 Testing Requirements

a. i. The affected turbines shall comply with the applicable testing requirements of 40 CFR 60.335.

ii. The affected HRSGs shall comply with the applicable testing requirements of 40 CFR 60.46b, and any other applicable testing requirements of Subpart Db.

7.1.8 Monitoring Requirements

a. i. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60 Subpart GG shall install and operate a continuous monitoring system to monitor and record the fuel consumption in the affected turbines [40 CFR 60.334(a)].

ii. The affected turbines shall comply with the applicable monitoring requirements of 40 CFR 60.334(b) except monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the affected turbines, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciable to NO_x emissions.

b. i. The Permittee shall install a Continuous Emissions Monitoring (CEM) system to evaluate emissions of nitrogen oxides from each affected turbine and affected HRSG system to demonstrate compliance with the limitations of this permit.

A. The procedures under 40 CFR 60.13 shall be followed for the installation, evaluation, and operation of the continuous monitoring systems.

ii. The Permittee shall install monitors on each affected turbine and affected HRSG capable of measuring and recording daily fuel consumption (mmBtu/day or scf/day).

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected turbines and affected HRSGs to demonstrate compliance with Conditions 5.5.1, 7.1.3, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. A maintenance and repair log for each affected turbine and affected HRSG, listing activities performed with date.

b. The sulfur content of the fuel fired in the affected turbines and affected HRSGs.

c. Fuel consumption for the affected turbines and affected HRSGs, scf/day and scf/year.

d. Operating hours for the affected turbines and affected HRSGs, hr/day and hr/year.

e. Heat content of the fuels being fired in the affected turbines and affected HRSGs.

f. Daily, 365 day rolling totals of NO_X, CO, SO_2, VOM, and PM emissions from the cogeneration plant.

g. Daily steam production for all affected HRSG units combined.

h. Emissions of each pollutant from the affected turbines and affected HRSGs, including emissions from startups, with supporting calculations including documentation on the validity of the emission factors used, ton/day and ton/yr. NO_x emissions shall be based on data from the CEM, while the other emissions shall be calculated based on fuel consumption.

i. The Permittee shall maintain the following if required:

   i. Any periods during which a continuous monitoring system was not operational, with explanation.

   ii. Any day in which emission and/or opacity exceeded an applicable standard or limit.

j. Records for Startup

   The Permittee shall maintain the following records, pursuant to Section 39.5(7)(b) of the Act, for each affected turbine and/or affected HRSG subject to Condition 7.1.3(g), which at a minimum shall include the following information for each startup:

   i. Date and duration of the startup, i.e., start time and time normal operation achieved.

ii. If normal operation was not achieved within 2-hours, an explanation why startup could not be achieved.

iii. An explanation why established startup procedures could not be performed, if not performed.

iv. The nature of opacity, i.e., severity and duration, during the startup and the nature of opacity at the conclusion of startup, if above normal.

v. Whether exceedance of Condition 5.2.2 may have occurred during startup, with explanation and estimated duration (minutes).

k. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected turbine and/or affected HRSG 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 damaged feature(s) could not be repaired as soon as practicable or the affected turbine and/or affected HRSG could not be removed from service without risk of injury to personnel or severe damage to equipment.

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.

7.1.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected turbine and/or affected HRSG 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. Notification within 30 days for operation of an affected turbine and/or affected HRSG that was not in compliance with applicable requirements of Condition 7.1.3, 7.1.5, or 7.1.6.

b. The affected turbines and affected HRSGs shall comply with the applicable quarterly reporting requirements of 40 CFR 60.7(c) and 60.334(c).

c. Reporting of Malfunctions and Breakdowns

The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of an affected turbine during malfunction or breakdown.

i. The Permittee shall notify the Illinois EPA'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.

ii. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected turbine was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected turbine was taken out of service.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

a. In conjunction with a natural gas operating mode, the affected turbines/HRSG may be fired with commercial grade fuel (i.e., methane off-gas produced as a by-product in the associated manufacturing facility) as provided in Permit 00040096.

7.1.12 Compliance Procedures

a. Compliance with Condition 7.1.3(c)(i)(A) and (B) is demonstrated by the monitoring requirements of 7.1.8 and by the recordkeeping requirements of 7.1.9.

b. Compliance with Condition 7.1.3(d) is demonstrated by proper operating conditions of the affected turbines.

c. Compliance with Condition 7.1.3(e) is considered to be assured by the normal work practices and maintenance activities inherent in operation of the affected HRSGs.

d. i. Compliance with Condition 7.1.3(c)(ii)(A) is demonstrated by the monitoring requirements of 7.1.8 and by the recordkeeping requirements of 7.1.9.

ii. Compliance with Condition 7.1.3(f) is demonstrated by the monitoring requirements of 7.1.8 and by the recordkeeping requirements of 7.1.9.

e. Compliance with the emission limits in Conditions 5.5 and 7.1.6 shall be determined by using published emission factors, Illinois EPA approved stack test data, Illinois EPA approved measured emission factors, or approved manufacturer’s data and the recordkeeping requirements in Condition 7.1.9.

7.2 Boilers (Subject to NSPS - 40 CFR Subpart D)

7.2.1 Description

The boilers are fuel combustion emission units used to generate electricity and steam. The boilers are powered by natural gas or commercial grade fuel (i.e., methane off-gas produced as a by-product in the associated manufacturing facility).

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Boiler 5	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	None
Boiler 6	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	None

7.2.3 Applicability Provisions and Applicable Regulations

a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.2.1 and 7.2.2.

b. The affected boilers are subject to the emission limits identified in Condition 5.2.2.

c. The affected boilers are subject to the NSPS for Fossil-Fuel-Fired Steam Generators, 40 CFR 60 Subparts A and D, because the construction, modification, or reconstruction is commenced after August 17, 1971 and has a maximum design heat input capacity of more than 73 megawatts (MW) (250 million Btu per hour (Btu/hr)). The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

i. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.44(a)(1), no owner or operator shall cause to be discharged into the atmosphere from any affected boiler any gases which contain nitrogen oxides, expressed as NO_2 in excess of 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.

ii. Standard for Particulate Matter:

Pursuant to 40 CFR 60.42(a)(1), no owner or operator shall cause to be discharged into the atmosphere from any affected boiler any gases

which contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel or fossil fuel and wood residue.

iii. Standard for Opacity:

Pursuant to 40 CFR 60.42(a)(2), no owner or operator shall cause to be discharged into the atmosphere from any affected boiler any gases which exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

d. 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].

e. No person shall cause or allow the emission of nitrogen oxides (NO_x) into the atmosphere in any one hour period from any new fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mmBtu/hr) to exceed the following standards and limitations:

i. For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mmBtu) of actual heat input [35 IAC 217.121(a)].

f. Malfunction and Breakdown Provisions

In the event of a malfunction or breakdown of an affected boiler, the Permittee is authorized to continue operation of the affected boiler in violation of the applicable requirement of Condition 5.2.2(b) (35 IAC 212.123(a)) and the hourly limits of Conditions 7.2.6, as necessary to provide essential service, i.e. prevent interruption in or shortage of the public's electricity supply, provided that operation shall not be continued solely for the economic benefit of the Permittee or to prevent risk of injury to personnel or severe damage to equipment. This authorization is subject to the following requirements:

i. The Permittee shall repair the damaged feature(s) of the affected boiler or remove the affected boiler from service as soon as practicable.

ii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.2.9(k) and 7.2.10(b).

7.2.4 Non-Applicability of Regulations of Concern

a. The provisions of 35 IAC 218.301 and 302, Use of Organic Material, shall not apply to fuel combustion emission sources [35 IAC 218.303].

b. The control requirements of 35 IAC 218 Subpart TT shall not apply to fuel combustion units [35 IAC 218.980(f)].

c. Pursuant to 40 CFR 72.6(b)(4)(i), cogeneration plants that will not be selling one third, or more, of its potential electrical output or more than 219,000 Mwe-hours actual electric output on an annual basis is not subject to the requirements of the Acid Rain Program.

d. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected boilers does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected boiler in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

b. Natural gas or commercial grade fuel shall be the only fuels in the affected boilers.

i. The Permittee shall not burn butadiene or butadiene/propylene mixture in any affected boiler during start-up, shutdown, malfunction, and breakdown or when the affected boiler load is less than 25 percent of the rated heat input capacity.

ii. The Permittee shall visually inspect the affected boiler and associated equipment daily for leaks, spills, fugitive emissions, and sign of tempering when the butadiene or butadiene/propylene mixture is burned.

iii. The heat input to the affected boiler from butadiene or butadiene/propylene mixture shall not exceed 25% of total heat input to the affected boiler.

iv. Organic liquid by-products or waste materials, other than the propylene and butadiene specified above, shall not be used in these fuel combustion emission sources without written approval from the Illinois EPA.

v. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

c. Operation of the affected boilers 5 and 6 shall be placed into "Hot Standby Mode" such that the firing rate of each affected boiler does not exceed 10 percent of rated heat input. Operation of these affected boilers in a "Normal Mode", that is with a firing rate of greater than 10 percent heat input is allowed during extraordinary circumstances which include but are not limited to the following:

i. Cold startups for the manufacturing facilities owned by Equistar Chemicals, LP.

ii. Periods when one or more of the combustion turbines (PN: 96120050) are out of service.

iii. Periods when one or more of the Heat Recovery Steam Generators (PN: 96120050) are out of service.

iv. Other circumstances in which the boiler(s) are needed to supply steam to the manufacturing operations.

d. The annual fuel usage in the affected Boiler 6 shall not exceed 732,820 mmBtu. Compliance with this limit shall be determined by a rolling total 12 months of data. [T1]

Note: This limitation is established in Construction Permit 04070045.

7.2.6 Emission Limitations

In addition to the source wide emission limitations in Condition 5.5, the affected boilers are subject to the following:

a. The annual emissions of the affected boiler 6 shall not exceed 55.0 tons of NO_x and 1.98 tons of VOM. These limits are based on average NO_x and VOM emission rates of 0.15 and 0.0055 lb/mmBtu, respectively, and annual operation for 1,848 hours of full load (312 million Btu/hour) and 5,040 hours of hot standby operation (31 million Btu/hour, which is 10% load).

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

Note: This limitation is established in Construction Permit 04070045.

7.2.7 Testing Requirements

For the affected boilers, the Permittee shall comply with applicable testing requirements of 40 CFR 60, Subpart D.

7.2.8 Monitoring Requirements

a. For the affected boilers, the Permittee shall comply with the applicable monitoring requirements of 40 CFR 60.45.

i. Pursuant to 40 CFR 60.45(a), each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide.

b. Pursuant to 35 IAC 217.456(c), unless the Permittee relies on the alternative monitoring provisions, the Permittee shall install, operate, and maintain a Continuous Emissions Monitoring (CEM) system on the affected boilers to measure emissions of NO_x. The applicable procedures under 40 CFR 75.12 and 40 CFR 75, subpart H shall be followed for the installation, evaluation, and operation of this NO_x CEM system.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items

for the affected boilers to demonstrate compliance with Conditions 5.5.1, 7.2.3, 7.2.5, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

a. A maintenance and repair log for each affected boiler, listing activities performed with date.

b. The sulfur content of the fuel fired in the affected boilers.

c. Fuel consumption for the affected boilers, scf/day and scf/year.

d. Operating hours for the affected boilers, hr/day and hr/year.

e. Heat content of the fuel being fired in the affected boilers.

f. The Permittee shall keep records of the amount of butadiene and butadiene/propylene mixture burned in the affected boilers. The Permittee shall also keep record of minimum affected boiler load at which the butadiene or butadiene/propylene mixture was burned in the affected boilers. These records shall be made available to the Illinois EPA's representative on request.

g. NO_x emissions from the affected boilers 5 and 6 shall be based on data from the CEM. Other emissions shall be calculated based on fuel consumption data.

h. Time, date, and duration of operation of existing the existing affected boilers in operation other than "Hot Standby Mode" with written explanation for such operation.

i. Emissions of each pollutant from the affected boilers, including emissions from startups, with supporting calculations including documentation on the validity of the emission factors used, ton/day and ton/yr.

j. The Permittee shall maintain the following if required:

    i. Any day in which emission and/or opacity exceeded an applicable standard or limit.

    ii. Any periods during which a continuous monitoring system was not operational, with explanation.

k. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected boiler 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 damaged feature(s) could not be repaired as soon as practicable or the affected boiler could not be removed from service without risk of injury to personnel or severe damage to equipment.

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.

7.2.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected boiler 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. Notification within 30 days for operation of an affected boiler that was not in compliance with applicable requirements of Section 7.2.3, 7.2.5, and 7.2.6.

b. Reporting of Malfunctions and Breakdowns

The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of an affected boiler during malfunction or breakdown.

i. The Permittee shall notify the Illinois EPA'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.

ii. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected boiler was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected boiler was taken out of service.

c. The Permittee shall submit an annual report of the BTU value of butadiene or butadiene/propylene mixture and total BTU values of the fuel burned in each affected boiler within 30 days of the end of each year.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

a. In conjunction with a natural gas operating mode, the affected boilers may be fired with commercial grade fuel (i.e., methane off-gas produced as a by-product in the associated manufacturing facility) as provided in Permit 00040096.

7.2.12 Compliance Procedures

a. Compliance with Condition 7.2.3(d) is considered to be assured by the normal work practices and maintenance activities inherent in operation of the affected boilers.

b. Compliance with Conditions 7.2.3(c)(ii) is considered to be assured by the normal work practices and maintenance activities required in Condition 7.2.5(a) and the records required in Condition 7.2.9.

c. Compliance with Conditions 7.2.3(c)(iii) is considered to be assured by the normal work practices and maintenance activities required in Condition 7.2.5(a) and the records required in Condition 7.2.9.

d. Compliance with Condition 7.2.3(c)(i) and 7.2.3(e) is demonstrated by the monitoring requirements of 7.2.8 and by the recordkeeping requirements of 7.2.9.

e. Compliance with the emission limits in Conditions 5.5 and 7.2.6 shall be determined by using published

emission factors, Illinois EPA approved stack test data, Illinois EPA approved measured emission factors, or approved manufacturer's data and the recordkeeping requirements in Condition 7.2.9.

7.3 Boilers

7.3.1 Description

The boilers are fuel combustion emission units used to generate electricity and steam. The boilers are powered by natural gas or commercial grade fuel (i.e., methane off-gas produced as a by-product in the associated manufacturing facility).

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Boiler 1	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	None
Boiler 2	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	None
Boiler 3	Natural or Commercial Gas Fired Boiler (312.0 mmBtu/hr)	None

7.3.3 Applicability Provisions and Applicable Regulations

a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.3.1 and 7.3.2.

b. The affected boilers are subject to the emission limits identified in Condition 5.2.2.

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. No person shall cause or allow the emission of nitrogen oxides into the atmosphere in any one hour period from any existing fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mmBtu/hr), located in the Chicago or St. Louis (Illinois) major metropolitan areas to exceed the following limitations:

   i. For gaseous and/or liquid fossil fuel firing, 0.46 kg/MW-hr (0.3 lbs/mmBtu) of actual heat input [35 IAC 217.141].

e. Malfunction and Breakdown Provisions

   In the event of a malfunction or breakdown of an affected boiler, the Permittee is authorized to continue operation of the affected boiler in

violation of the applicable requirement of Condition 5.2.2(b) (35 IAC 212.123(a)) and the hourly limits of Conditions 7.3.6, as necessary to provide essential service, i.e. prevent interruption in or shortage of the public's electricity supply, provided that operation shall not be continued solely for the economic benefit of the Permittee or to prevent risk of injury to personnel or severe damage to equipment. This authorization is subject to the following requirements:

i. The Permittee shall repair the damaged feature(s) of the affected boiler or remove the affected boiler from service as soon as practicable.

ii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.3.9(k) and 7.3.10(b).

7.3.4 Non-Applicability of Regulations of Concern

a. The provisions of 35 IAC 218.301 and 302, Use of Organic Material, shall not apply to fuel combustion emission sources [35 IAC 218.303].

b. The control requirements of 35 IAC 218 Subpart TT shall not apply to fuel combustion units [35 IAC 218.980(f)].

c. i. This permit is issued based on the affected boilers 1, 2, and 3 not being subject to the requirements of the NO_x Trading Program, 35 IAC 217 Subpart W, because the Permittee has elected low-emitter status for each affected unit pursuant to 35 IAC 217.454(c) (see also Condition 7.3.5(d)).

ii. Pursuant to 35 IAC 217.472(c), the affected boilers 1, 2, and 3 shall become subject to the requirements of this 35 IAC 217 if, for any control period under this Section 217.472, the fuel use restriction or the operating hours restriction under subsection (a) of this 35 IAC 217.472 is removed from the affected boilers 1, 2, and 3's permit or otherwise is no longer applicable, or the affected boilers 1, 2, and 3 does not comply with the fuel use restriction or the operating hours restriction under subsection (a) of 35 IAC 217.472. Such affected boilers 1, 2, and 3 shall be treated as commencing operation on September 30 of the control period for which the fuel use restriction or the operating hours restriction

is no longer applicable or during which the affected boilers 1, 2, and 3 does not comply with the fuel use restriction or the operating hours restriction. For the affected boilers 1, 2, and 3, the Permittee then must comply with all applicable requirements of the NO_x Trading Program that apply to a budget unit.

iii. Pursuant to 35 IAC 217.472(d), the owner or operator of affected boilers 1, 2, and 3 to which the Illinois EPA has ever allocated allowances under Appendix E of 35 IAC 217 may elect low-emitter status. In that case, the Illinois EPA will reduce the Subpart U NO_x budget by the number of allowances equal to the amount of NO_x emissions the affected boilers 1, 2, and 3 is permitted to emit during the control period, pursuant to a federally enforceable condition in the affected boilers 1, 2, and 3's permit. The owner or operator of an affected boilers 1, 2, and 3 electing low-emitter status may demonstrate that it holds sufficient allowances to cover the affected boilers 1, 2, and 3's NO_x emissions by offsetting the emissions from such affected boilers 1, 2, and 3, not to exceed its permitted emission limit as included in its federally enforceable permit, with allowances issued for voluntary NO_x reductions meeting the requirements of Subpart X of 35 IAC 217. The Illinois EPA will not reduce the Subpart U NO_x budget by the allowances issued for NO_x reductions obtained in accordance with Subpart X of 35 IAC 217.

d. Pursuant to 40 CFR 72.6(b)(4)(i), cogeneration plants that will not be selling one third, or more, of its potential electrical output or more than 219,000 Mwe-hours actual electric output on an annual basis is not subject to the requirements of the Acid Rain Program.

e. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent

practicable, maintain and operate any affected boiler in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

b. Natural gas or commercial grade fuel shall be the only fuels in the affected boilers.

   i. The Permittee shall not burn butadiene or butadiene/propylene mixture in any affected boiler during start-up, shutdown, malfunction, and breakdown or when the affected boiler load is less than 25 percent of the rated heat input capacity.

   ii. The Permittee shall visually inspect the affected boiler and associated equipment daily for leaks, spills, fugitive emissions, and sign of tempering when the butadiene or butadiene/propylene mixture is burned.

   iii. The heat input to the affected boiler from butadiene or butadiene/propylene mixture shall not exceed 25% of total heat input to the affected boiler.

   iv. Organic liquid by-products or waste materials, other than the propylene and butadiene specified above, shall not be used in these fuel combustion emission sources without written approval from the Illinois EPA.

   v. The Illinois EPA shall be allowed to sample all fuels stored at the above location.

c. Operation of the affected boilers 1, 2, and 3 shall be placed into "Hot Standby Mode" such that the firing rate of each affected boiler does not exceed 10 percent of rated heat input. Operation of these affected boilers in a "Normal Mode", that is with a firing rate of greater than 10 percent heat input is allowed during extraordinary circumstances which include but are not limited to the following:

   i. Cold startups for the manufacturing facilities owned by Equistar Chemicals, LP.

ii. Periods when one or more of the combustion turbines (PN: 96120050) are out of service.

iii. Periods when one or more of the Heat Recovery Steam Generators (PN: 96120050) are out of service.

iv. Other circumstances in which the boiler(s) are needed to supply steam to the manufacturing operations.

d. Pursuant to 35 IAC 217.454(c), the affected boilers 1, 2, and 3 and the Permittee are subject to the following requirements, as the Permittee had elected low-emitter status for the affected boilers 1, 2, and 3 for purposes of the NO_x Trading Program:

i. Each affected boilers 1, 2, and 3 shall burn only natural gas [35 IAC 217.472(a)(1)].

ii. The NO_x emissions of each affected boilers 1, 2, and 3 shall not exceed 0.0 tons of NO_x during the ozone control period of each year [35 IAC 217.472(a)(2)].

iii. Affected boiler 1, 2, and 3 shall not operate for more than 0.0 hours during the ozone control period of each year [35 IAC 217.472(a)(3)].

iv. Pursuant to 35 IAC 217.472(a)(4), the NO_x emissions of each affected boiler shall be calculated by using the monitoring provisions of 40 CFR 75, or if the unit does not rely on these monitoring provisions, as follows:

A. Select the applicable default NO_x emission rate:

0.7 lbs/mmBtu for combustion turbines burning natural gas exclusively during the control period; 1.2 lbs/mmBtu for combustion turbines burning any fuel oil during the control period; 1.5 lbs/mmBtu for boilers burning natural gas exclusively during the control period; or 2 lbs/mmBtu for boilers burning any fuel oil during the control period.

B. Multiply the default NO_x emission rate under subsection (a)(4)(A) of 35 IAC 217 by the affected boilers' maximum rated hourly heat input which is the higher of the manufacturer’s maximum rated hourly

heat input or the highest observed hourly heat input. The owner or operator of the affected boilers may request in the permit application required by this subsection that the Illinois EPA use a lower value for the unit's maximum rated hourly heat input. The Illinois EPA may approve such lower value if the owner or operator demonstrates that the maximum hourly heat input specified by the manufacturer or the highest observed hourly heat input, or both, are not representative. The owner or operator must demonstrate that such lower value is representative of the boilers' current capabilities because modifications have been made to the boilers that permanently limit the boilers' capacity.

(see also Condition 7.3.8(a))

Note: It should be noted that Condition 7.3.5(d)(i) restricts the fuel during the ozone control period to only natural gas. By-product gases are currently not authorized to be fired during the ozone control period, however the rule is anticipated to be amended to include by-product gases.

v. The Permittee shall maintain records for each affected boilers 1, 2, and 3 demonstrating that the above operating hour restriction, fuel usage restriction, and other requirements of this permit related to low-emitter status were met [35 IAC 217.472(a)(5)].

vi. By November 1 of each year, the Permittee shall report to the Illinois EPA for each affected boilers 1, 2, and 3 the operating hours (treating any partial hour of operation as a whole hour of operation), heat input, and fuel usage by type during the preceding ozone control period [35 IAC 217.472(a)(6)].

7.3.6 Emission Limitations

In addition to the source wide emission limitations in Condition 5.5, the affected boilers are subject to the following:

None

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

a. Pursuant to 35 IAC 217.472(a)(4), unless the Permittee relies on the alternative monitoring provisions of 7.3.5(d)(iv), the Permittee shall install, operate, and maintain a Continuous Emissions Monitoring (CEM) system on the affected boilers 1,2 and 3 to measure emissions of NO_x. The applicable procedures under 40 CFR 75.12 and 40 CFR 75, subpart H shall be followed for the installation, evaluation, and operation of this NO_x CEM system.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with Conditions 5.5.1, 7.3.3, 7.3.5, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

a. A maintenance and repair log for each affected boiler, listing activities performed with date.

b. The sulfur content of the fuel fired in the affected boilers.

c. Fuel consumption for the affected boilers, scf/day and scf/year.

d. Operating hours for the affected boilers, hr/day and hr/year.

e. Heat content of the fuel being fired in the affected boilers.

f. The Permittee shall keep records of the amount of butadiene and butadiene/propylene mixture burned in the affected boilers. The Permittee shall also keep record of minimum affected boiler load at which the butadiene or butadiene/propylene mixture was burned in the affected boilers. These records shall be made available to the Illinois EPA's representative on request.

g. Daily emissions of NO_x, CO, SO_2, VOM, and PM from the existing affected boilers 1, 2, and 3. Emissions shall be calculated based on fuel consumption data.

h. Time, date, and duration of operation of existing the existing affected boilers in operation other than

"Hot Standby Mode" with written explanation for such operation.

i. Emissions of each pollutant from the affected boilers, including emissions from startups, with supporting calculations including documentation on the validity of the emission factors used, ton/day and ton/yr.

j. The Permittee shall maintain the following if required:

i. Any day in which emission and/or opacity exceeded an applicable standard or limit.

k. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected boiler 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 damaged feature(s) could not be repaired as soon as practicable or the affected boiler could not be removed from service without risk of injury to personnel or severe damage to equipment.

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.

l. The Permittee shall maintain records for each affected boilers 1, 2, and 3 demonstrating that the above operating hour restriction, fuel usage restriction, and other requirements of this permit related to low-emitter status were met [35 IAC 217.472(a)(5)].

7.3.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected boiler 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. Notification within 30 days for operation of an affected boiler that was not in compliance with applicable requirements of Section 7.3.3, 7.3.5, and 7.3.6.

b. Reporting of Malfunctions and Breakdowns

The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of an affected boiler during malfunction or breakdown.

i. The Permittee shall notify the Illinois EPA'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.

ii. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected boiler was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected boiler was taken out of service.

c. The Permittee shall submit an annual report of the BTU value of butadiene or butadiene/propylene mixture and total BTU values of the fuel burned in each affected boiler within 30 days of the end of each year.

d. By November 1 of each year, the Permittee shall report to the Illinois EPA for each affected boilers 1, 2, and 3 the operating hours (treating any partial hour of operation as a whole hour of operation), heat input, and fuel usage by type during the preceding ozone control period [35 IAC 217.472(a)(6)].

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

a. In conjunction with a natural gas operating mode, the affected boilers may be fired with commercial grade fuel (i.e., methane off-gas produced as a by-product in the associated manufacturing facility) as provided in Permit 00040096.

Note: It should be noted that Condition 7.3.5(d)(i) restricts the fuel during the ozone control period to only natural gas. By-product gases are currently not authorized to be fired during the ozone control period, however the rule is anticipated to be amended to include by-product gases.

7.3.12 Compliance Procedures

a. Compliance with Condition 7.3.3(c) is considered to be assured by the normal work practices and maintenance activities inherent in operation of the affected boiler.

b. Compliance with Condition 7.3.3(d) is considered to be assured by the use of natural gas because natural gas contains negligible fuel bound nitrogen.

c. Compliance with Condition 7.3.5(d) is demonstrated by the requirements of Condition 7.3.5(d), the monitoring requirements of 7.3.8, the recordkeeping requirements of 7.3.9, and by the reporting of Condition 7.3.10.

d. Compliance with the emission limits in Conditions 5.5 and 7.3.6 shall be determined by using published emission factors, Illinois EPA approved stack test data, Illinois EPA approved measured emission factors, or approved manufacturer’s data and the recordkeeping requirements in Condition 7.3.9.

7.4 Cooling Towers

7.4.1 Description

The cooling towers are process emission units used to provide equipment cooling.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
TCT	Turbine Cooling Towers	None
CT	Chiller Cooling Towers	None

7.4.3 Applicability Provisions and Applicable Regulations

a. An "affected cooling tower" for the purpose of these unit-specific conditions, is a cooling tower described in Conditions 7.4.1 and 7.4.2.

b. The affected cooling towers are subject to the emission limits identified in Condition 5.2.2.

7.4.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on an affected cooling tower not being subject to the requirements of 35 IAC 212.321 or 212.322, because due to the unique nature of such unit, a process weight rate can not be set so that such rules can not reasonably be applied.

b. This permit is issued based on the affected cooling towers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected cooling towers does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.4.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected cooling tower in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected cooling towers are subject to the following:

a. The particulate matter (PM/PM_{10}) emissions from the cooling tower associated with the air chilling system for the turbines shall not exceed 1.6 ton/year.

b. The particulate matter (PM/PM_{10}) emissions from the cooling tower associated with the steam turbine generator shall not exceed 1.84 ton/year.

c. The particulate matter (PM/PM_{10}) emissions from the cooling towers and the gas turbines themselves shall not exceed 22.4 tons/year, consistent with the limit on the cogeneration plant PM/PM_{10} emissions set in Permit No. 96120050, original date issued October 20, 1997.

d. 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].

e. The above limitations were established in Permits 99030108 and 96120050 [T1].

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected cooling towers to demonstrate compliance with Conditions 5.5.1, 7.4.3, 7.4.5, and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

a. A maintenance and repair log for each affected cooling tower, listing activities performed with date.

b. Cooling water drift rate, gallons/hour, based on representative operation of the cooling tower.

c. Cooling water total dissolved solids (TSD) content, based on representative sampling of water discharge.

d. Actual cooling tower operating hours, hours/month.

e. Emissions of each pollutant from the affected cooling towers, including emissions from startups, with supporting calculations including documentation on the validity of the emission factors used, ton/day and ton/yr.

7.4.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected cooling tower 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. Notification within 30 days for operation of an affected cooling tower that was not in compliance with applicable requirements of Section 7.4.3, 7.4.5, and 7.4.6.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

a. Compliance with Condition 7.4.3(b) is demonstrated by proper operating conditions of the affected cooling towers.

b. Compliance with the emission limits in Condition 7.4.6 shall be determined by using Illinois EPA approved published emission factors such as AP-42, Illinois EPA approved stack test data results, Illinois EPA approved measured emission factors, or Illinois EPA approved manufacturer’s data and the recordkeeping requirements in Condition 7.4.9.

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 October 7, 2003 (the date of issuance of the draft 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.

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. 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 Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
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 determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which 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. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section (MC 11)

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

iv. USEPA Region 5 - Air Branch

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

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

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 [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

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, 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, 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 such malfunction or breakdown is allowed by a permit condition [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 thereunder.

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, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

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

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 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. As 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 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, Compliance 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 Section, 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 [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment 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:

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.

Normally, an act of God such as lightning or flood is considered an emergency;

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.

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, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, 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 inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

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 under Section 39.5(15)(b) 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, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. 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

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 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: _____

10.2 Attachment 2 - 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 (CAAPP Form-199).

Application For A Construction Permit Form (CAAPP Form-199):

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

MNP:psj