

217/782-2113

**TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹**

PERMITTEE

Metropolitan Water Reclamation District of Greater Chicago
Attn: Thomas K. O'Connor, Chief of M&O
100 East Erie Street
Chicago, Illinois 60611-2803

Application No.: 95090075 I.D. No.: 031300AAL
Applicant's Designation: Date Received: September 7, 1995
Operation of: Wastewater Treatment Operation
Date Issued: February 7, 2000
Source Location: 6001 West Pershing Road, Stickney, Cook County
Responsible Official: Hugh H. McMillan/General Superintendent
Expiration Date²: February 7, 2005

This permit is hereby granted to the above-designated Permittee to operate a Municipal Wastewater Treatment Source, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Michael J. Knobloch at 217/782-2113.

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

DES:MJK: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 Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit.

² Except as provided in condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Stickney Water Reclamation Plant
6001 West Pershing Road
Stickney, Illinois 60650
Phone # 708/222-4000

I.D. No.: 031300AAL
Standard Industrial Classification: 4952, Sanitary Services-
Sewerage Systems

1.2 Owner/Parent Company

Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611-2803

1.3 Operator

Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611-2803

Thomas O'Connor
708/588-4000

1.4 General Source Description

The Stickney Water Reclamation Plant is located at 6001 West Pershing Road, Stickney. The source treats domestic and industrial wastewater from the central part of Chicago.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
Agency	Illinois Environmental Protection Agency
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
°C	Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
cm	Centimeter
CO	Carbon Monoxide
ERMS	Emission Reduction Marketing System
°F	Fahrenheit
gal	gallon
HAP	Hazardous Air Pollutant
hr	hour
in	inch
JEIP	Joint Emission Inventory Program
KPa	Kilopascal
Kg	Kilogram
l	Liter
LAER	Lowest Achievable Emission Rate
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
lb	pound
m ³	Cubic meter
MACT	Maximum Achievable Control Technology
Mg	Megagram
min	Minute
mmBtu	Million British thermal units
mmscf	Million standard cubic foot
mo	month
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
psi	Pound per square inch
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
T1	Title I - Identifies Title I conditions that have been carried over from an existing construction permit
T1N	Title I New - Identifies Title I conditions that are being established in this permit
T1R	Title I Revision - Identifies Title I conditions that have been carried over from an existing construction permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
yr	Year
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:

Post-digestion Centrifuge
Pre-digestion Centrifuge
Sludge Cake Truck/Railcar Loading
Southwest Side Scum Concentration tanks
Southwest Side Grit Channels Dewatering Tanks
TARP Morning Glory
West Side Grit Dewatering Tanks
West Side Scum Concentration Tanks

- 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:

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

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

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

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

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 215.182, 218.182, or 219.182.

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 215.301, 218.301, or 219.301, 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
01	Ozone System for Sludge Thickener Area OZG1 & OZG2 & Ozone System for Digester Holding Tanks, OZG3 & OZG4	OZG1 & OZG2 - 4/88 OZG3 & OZG4 - 5/90	None
02	Two 10,000 gallon gasoline storage tanks GT1 & GT2	GT1 - 1985 GT2 - 11/96	Submerged Loading Pipe
03	Digester Gas Boilers B1, B2, B3, B4, B5, and B7	B1&B2-3/80 B3, B4, and B5-1/85 B7-12/97	Hydrogen Sulfide Removal System
04	Waste Gas Burner Units WGB1 (six identical units), WGB2 (six identical Units)	WGB1-7/90 WGB2-5/90	None
05	Digester Holding Tanks (1-12)	1-4 1963 5-8 1968 9-12 1992	None
06	Gas Turbine DC-990 (maximum firing rate 41.66 mmBtu/hr)	DC-990 -7/86	Hydrogen Sulfide Removal System

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 No_x and VOM emissions.
- 5.1.2 This permit is issued based on the source not being a major source of HAPs.

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.
 - 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.
 - c. Emission limitations for Roadways and Parking Areas. No person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent, except that the opacity shall not exceed 5 percent at quarries with a capacity to produce more than 1 million ton/yr of aggregate [35 IAC 212.316(c)].
 - d. Emission Limitations for all Other Emission Units. Unless an emission unit has been assigned a particulate matter, PM₁₀, or fugitive particulate matter emission limitation elsewhere in this Section, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent [35 IAC 212.316(f)].

- e. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also attachment 1) [35 IAC 212.321(a)].
- f. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (see also attachment 2) [35 IAC 212.322(a)].
- g. No person shall cause or allow the emission into the atmosphere, of PM₁₀ from any process emission unit to exceed 68.7 mg/scm (.03 gr/scm) during any one hour period [35 IAC 212.324(b)].

5.2.3 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 Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner

or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
 - b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.
- 5.2.5
- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC 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 40 CFR Part 70 or 71.
 - 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 requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.
- 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; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 PM₁₀ Contingency Measure Plan

Should this stationary source, as defined in 35 IAC 212.700, become subject to the requirement to prepare and submit a contingency measure plan reflecting the PM₁₀ emission reductions as set forth in 35 IAC 212.703, then the owner or operator shall submit such plan to the Illinois EPA for review and approval within ninety (90) days after the date this source becomes subject to this requirement. Such plan will be incorporated by reference into this permit and shall be implemented in accordance with 35 IAC 212.704. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U, incorporated herein by reference.

5.3 Non-Applicability of Regulations of Concern

5.3.1 The Wastewater Treatment Operations, including equalization tanks, holding tanks, aeration tanks, settling tanks, sludge drying beds, centrifuges, and other wastewater treatment operations are not subject to the following regulations:

- a. The affected wastewater treatment operations are not subject to the NESHAP for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater, 40 CFR 63, Subpart G, because the source does not manufacture as a primary product one or more of the chemicals listed in table 1 of 40 CFR 63 Subpart F.

- b. The affected wastewater treatment operations are not subject to the NSPS for Sewage Treatment Plants, 40 CFR 60 Subpart O, because there is no incinerator that combusts wastes containing more than 10 percent sewage sludge (dry basis) produced by municipal sewage treatment plants, or an incinerator that charges more than 1000 Kg (2205 Lb) per day municipal sewage sludge (dry basis) associated with these affected wastewater treatment operations.
- c. The affected wastewater treatment operations are not subject to the NSPS for VOC Emissions from Petroleum Refinery Wastewater Systems, 40 CFR 60 Subpart QQQ, because the affected wastewater treatment operations are not located at a petroleum refinery.
- d. The affected wastewater treatment operations are not subject to 35 IAC 218.443, Wastewater (Oil/Water) Separator, because the affected wastewater treatment operations are not located at a petroleum refinery.
- e. This permit is issued based on the affected wastewater treatment operations not being subject to 35 IAC 218 Subpart TT, Other Emission Units, because the affected wastewater treatment operations are exempted from the control requirements of 35 IAC 218 Subpart TT by 35 IAC 218.980(f)

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)	332.68
Sulfur Dioxide (SO ₂)	83.61
Particulate Matter (PM)	53.5
Nitrogen Oxides (NO _x)	326.5
HAP, not included in VOM or PM	---
TOTAL	796.29

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 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.

5.6.2 Records for Fugitive Emissions

- a. The owner or operator of any fugitive particulate matter emission unit subject to this Section shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of this Section and shall submit

to the Agency an annual report containing a summary of such information. [35 IAC 212.316(g)(1)]

- b. The records required by condition 5.6.2(a) shall include at least the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner and/or operator of the source;
 - iii. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;
 - iv. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical.
 - v. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and
 - vi. A log recording incidents when control measures were not used and a statement of explanation.
- c. Copies of all records required by this Section shall be submitted to the Agency within ten (10) working days after a written request by the Agency and shall be transmitted to the Agency by a company-designated person with authority to release such records [35 IAC 212.316(g)(3)].
- d. A quarterly report shall be submitted to the Agency stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not

applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of this Section. This report shall be submitted to the Agency thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31 [35 IAC 212.316(g)(5)].

- e. The permittee shall maintain a record of the maximum aggregate annual emissions of Fugitive PM (i.e., road dust) estimated based on the applicable emission factors and formulas specified by condition 5.9.1, with supporting calculations, so as to demonstrate compliance with the limits in condition 5.5.
- f. This record shall be updated upon construction of additional roadways or parking areas or other permanent change to the source, that alters the maximum aggregate emissions of PM.
- g. The Permittee shall maintain a record of the maximum aggregate annual emissions of fugitive VOM (i.e., wastewater treatment operations) estimated based on the applicable emission factors and formulas specified by Condition 5.9.1, with supporting calculations, so as to demonstrate compliance with the limits in Condition 5.5.

5.6.3 Records for Operating Scenarios

The Permittee shall maintain records of the following items for the wastewater treatment operations, pursuant to Section 39.5(7)(b) of the Act:

- a. The amount of wastewater treated, gal/day and gal/yr;

5.6.4 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 noncompliance 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 NSPS Recordkeeping

- a. Any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility [40 CFR 60.7(b)].
- b. Any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all performance testing measurements and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, reports, and records [40 CFR 60.7(e)].

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

- a. 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.

- b. For the purpose of estimating fugitive PM emissions from the roadways and parking areas at the source, the emission factors and formulas in Section 13.2.1 and 13.2.2 of AP-42, Volume I, Supplement F, January 1995 are acceptable.

- c. For the purpose of estimating fugitive VOM emissions from the wastewater treatment operations at the source, the use of emission factors in the February 1998 Emission Reduction Market System (ERMS) application is acceptable. The JEIP system was developed by the South Coast Air Quality Management District (SCAQMD) based on SCAQMD Rule 1179 Emissions Inventory Report for JEIP.

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of 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. Once the ERMS begins, 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 during initial issuance of 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.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.2 Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 IAC Part 205.

6.3 Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.5.
 - i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;
 - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;
 - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);
 - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and
 - v. VOM emissions from certain new and modified emission units as addressed by Condition 6.8(b), if applicable, in accordance with 35 IAC 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

6.4 Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 IAC 205.610(a).

- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).
- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

6.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.3, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
 - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
 - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6.6 Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in Sections 5 and 7 of this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 IAC 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:
 - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
 - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

6.7 Annual Account Reporting

- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:
 - i. Actual seasonal emissions of VOM from the source;
 - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
 - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;
 - iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the

associated emergency conditions report that has been approved by the Illinois EPA;

- v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and
 - vi. If a source is operating a new or modified emission unit for which three years of operational data is not yet available, as specified in 35 IAC 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.
- b. This report shall be submitted by October 31 of each year, for the preceding seasonal allotment period.

6.8 Allotment of ATUs to the Source

- a.
 - i. The allotment of ATUs to this source is 255 ATUs per seasonal allotment period.
 - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 25.4776 tons per season.
 - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.11 of this permit.
 - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
 - v. Condition 6.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.

b. Contingent Allotments for New or Modified Emission Units

Not applicable.

c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:

i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;

ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and

iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.9 Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 IAC 205.700(a)]:

a. Seasonal component of the Annual Emissions Report;

b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.6(a); and

c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.10 Federal Enforceability

Section 6 becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

6.11 Exclusions from Further Reductions

a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:

i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;

- ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
- iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.405(a) and (c)]:

- Boiler B-1
- Boiler B-2
- Boiler B-3
- Boiler B-4
- Boiler B-5
- Boiler B-7
- Gas Turbine

- b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 IAC 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 IAC 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 IAC 205.405(b) and (c)]:

- Wastewater Liquid Treatment Process
- Waste Gas Burner WGB-1
- Waste Gas Burner WGB-2

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01 - Ozone Systems
Control None

7.1.1 Description

The Ozone Systems generate ozone that is used to control odor from holding tanks and sludge concentration tanks. Ozone from these units is injected into the air exhausted from the holding tanks and sludge concentration tanks prior to passing through a contact chamber.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Ozone System for Sludge Thickener Area OZG1 & OZG2 & Ozone System for Digester Holding Tanks, OZG3 & OZG4	OZG1 & OZG2 - 4/88 OZG3 & OZG4 - 5/90	None

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected ozone system" for the purpose of these unit-specific conditions, are units OZG1, OZG2, OZG3, and OZG4 as described in condition 7.1.2.
- b. Each affected ozone system is subject to the emission limits identified in Condition 5.2.2.
- c. Except as further provided by this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm. [35 IAC 214.301]

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected ozone systems not being subject to the requirements of 35 IAC 212.321 or 212.322 because due to the unique nature of these units, a process weight rate cannot be set so that such rules cannot reasonably be applied.

7.1.5 Control Requirements

None

7.1.6 Emission Limitations

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

Emissions from the affected ozone systems shall not exceed the following limits:

Emission Unit	Emissions NO _x (ton/yr)	Emissions SO ₂ (ton/yr)
OZG1 and OZG2	1.37	13.9
OZG3 and OZG4	.46	3.94

The above limitations are being established in this permit pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions from the ozone systems below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application. [T1N]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1N]

7.1.7 Operating Requirements

None

7.1.8 Inspection Requirements

None

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 each affected ozone system to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of ozone produced, lb/mo; and ton/yr

- b. Monthly and annual aggregate NO_x and SO₂ emissions from each affected ozone system, based on ozone production and the applicable emission factors, with supporting calculations.
- c. Monthly hydrogen sulfide measurements in ppm to determine SO₂ concentration.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected ozone system 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:

- a. Emissions from an affected ozone system in excess of the limits specified in Condition 7.1.6.
- b. Emissions of sulfur dioxide into the atmosphere from an affected ozone system in excess of the limits specified in Condition 7.1.3(c).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance with the emission limits in Condition 5.5 and 7.1.6 from the affected ozone systems shall be based on the recordkeeping requirements in Condition 7.1.9 and the special emission factors and formula listed below:

Table 1. Emission Factors for OZG1 and OZG2

Pollutant Type	Emission Factor (lb/lb ozone)
NO _x	0.03

Table 2. Emission Factors for OZG3 and OZG4

Pollutant Type	Emission Factor (lb/lb ozone)
NO _x	0.03

The above NO_x emission factors came from the, Design Guidance Manual for Ozone Systems, 1990, Chapter 5, Ozone Destruction.

NO_x Emissions (tons) = ozone produced, lb x
applicable emission Factor x conversion
factor, ton/2000 lb

SO_2 emissions shall be calculated using the following equation.

SO_2 Emissions (lb/hr) = (H_2S concentration, ppm) x
(air flow rate, cfm) x (molecular weight H_2S) x (M.W.
 $\text{SO}_2/\text{M.W. H}_2\text{S}$) x ($1.56\text{E-}7$)

Where:

Molecular weight H_2S = 34
Molecular weight SO_2 = 64
Air flow rate = 60,000 cfm

7.2 Unit 02 - Gasoline Storage Tanks
Control Submerged loading pipe

7.2.1 Description

Two gasoline storage tanks, storing gasoline for use in various facility vehicles and equipment.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
02	Two 10,000 gallon gasoline storage tanks GT1 & GT2	GT1 - 1985 GT2 - 11/96	Submerged Loading Pipe

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected tanks" for the purpose of these unit specific conditions, are tanks GT1 and GT2 as described in Condition 7.2.2.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Agency according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with Section 218.108 of this Part, or unless such tank is a pressure tank as described in Section 218.121(a) or is fitted with a recovery system as described in Section 218.121(b)(2) [35 IAC 218.122(b)].
- c. The affected tanks are subject to 35 IAC 218.583 (c), which provides no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless:
 - i. The tank is equipped with a submerged loading pipe [35 IAC 218.583(a)(1)]; and
 - ii. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:

- A. A vapor collection system that meets the requirements of Condition 7.2.5(c) (see also 35 IAC 218.583(d)(4)) [35 IAC 218.583(a)(2)(A)]; or
 - B. A refrigeration condensation system or any other system approved by the Illinois EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent weight of all vaporized organic material from the equipment being controlled [35 IAC 218.583(a)(2)(B)]; and
 - C. The delivery vessel displays the appropriate sticker pursuant to the requirements of Section 218.584(b) or (d) [35 IAC 218.583(a)(2)(C)]; and
- iii. All tank vent pipes are equipped with pressure/vacuum relief valves with the pressure/vacuum relief valve shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column [35 IAC 218.583(a)(3)].
- d. The affected tanks are subject to 35 IAC 218.585, which provides that:
- i. No person shall sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth in subsections (b) and (c) of this Section during the regulatory control periods, which shall be May 1 to September 15 for retail outlets, wholesale purchaser-consumer operations, and all other operations [35 IAC 218.585(a)].
 - ii. The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 9.5 psi (65.5 kPa) during the regulatory control period in 1990 and each year thereafter [35 IAC 218.585(b)].
 - iii. The Reid vapor pressure of ethanol blend gasolines shall not exceed the limitations for gasoline set forth in Condition 7.2.3(d)(ii) of this Section by more than 1.0 psi (6.9 kPa). Notwithstanding this limitation, blenders of

ethanol blend gasolines whose Reid vapor pressure is less than 1.0 psi above the base stock gasoline immediately after blending with ethanol are prohibited from adding butane or any product that will increase the Reid vapor pressure of the blended gasoline [35 IAC 218.585(c)].

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected tanks are not subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tanks have a capacity less than 40 m³.
- b. The affected tanks are not subject to the limitations of 35 IAC 218.120, Control Requirements for Storage Containers of VOL, pursuant to 35 IAC 218.119, because the affected tanks are used to store a petroleum liquid and the capacity is less than 151 m³ (40,000 gal).
- c. The affected tanks are not subject to the requirements of 35 IAC 218.121, Storage Containers of VPL, pursuant to 35 IAC 218.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m³ (40,000 gal).
- d. The affected tanks are not subject to the requirements of 35 IAC 218.586, Gasoline Dispensing Operations - Motor Vehicle Fueling Operations, pursuant to 35 IAC 218.586(b), which exempts any gasoline dispensing operation which dispenses an average monthly volume of less than 10,000 gallons of motor vehicle fuel per month. Pursuant to 35 IAC 218.586(a)(1), average monthly volume means the amount of motor vehicle fuel dispensed per month from a gasoline dispensing operation based upon a monthly average for the 2-year period of November, 1990 through October, 1992 or, if not available, the monthly average for the most recent twelve calendar months. Monthly averages are to include only those months when the operation was operating.

7.2.5 Operational and Production Limits and Work Practices

- a. The affected tanks shall only be used for the storage of gasoline.

- b. Pursuant to 35 IAC 218.583(c), each owner of a gasoline dispensing operation shall:
 - i. Install all control systems and make all process modifications required by Condition 7.2.3(b) (see also 35 IAC 218.583(a)) [35 IAC 218.583(c)(1)];
 - ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system [35 IAC 218.583(c)(2)]; and
 - iii. Repair, replace or modify any worn out or malfunctioning component or element of design [35 IAC 218.583(c)(3)].

- c. Pursuant to 35 IAC 218.583(d), each operator of a gasoline dispensing operation shall:
 - i. Maintain and operate each vapor control system in accordance with the owner's instructions [35 IAC 218.583(d)(1)];
 - ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system [35 IAC 218.583(d)(2)];
 - iii. Maintain gauges, meters or other specified testing devices in proper working order [35 IAC 218.583(d)(3)]; and
 - iv. Operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
 - A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B [35 IAC 218.583(d)(4)(A)]; and
 - B. Avoidable leaks of liquid during the filling of storage tanks [35 IAC 218.583(d)(4)(B)].

7.2.6 Emission Limitations

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

Emissions from the affected tanks shall not exceed the following limits:

Emission Unit	Emissions VOM (lb/mo)	Emissions VOM (ton/yr)
GT1	21.67	0.13
GT2	21.67	0.13

The above limitations are being established in this permit pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions from the tanks below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application. [T1N]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1N]

7.2.7 Testing Requirements

- a. Pursuant to 35 IAC 218.583(a)(4), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless the owner or operator of a gasoline dispensing operation demonstrates compliance with Condition 7.2.3(c)(iii) (see also 35 IAC 218.583(a)(3)), by March 15, 1995 or 30 days after installation of each pressure/vacuum relief valve, whichever is later, and at least annually thereafter, by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate. The owner or

operator shall maintain any records required by this condition for a period of three years.

- b. Within 15 business days after discovery of the leak by the owner, operator, or the Agency, repair and retest a vapor collection system which exceeds the limits of Condition 7.2.5(c)(4)(A) (see also 35 IAC 218.583(d)(4)(A)) [35 IAC 218.583(d)(5)].
- c. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the Reid vapor pressure of gasoline and the ethanol content of ethanol blend gasolines shall be determined according to the methods specified below:
 - i. Pursuant to 35 IAC 218.585(d), all sampling of gasoline required pursuant to the provisions of Conditions 7.2.7(c)(ii) and (c)(iii) (see also 35 IAC 218.585(e) and (f)) shall be conducted by one or more of the following approved methods or procedures:
 - A. For manual sampling, AST D4057 [35 IAC 218.585(d)(1)];
 - B. For automatic sampling, ASTM D4177 [35 IAC 218.585(d)(2)]; or
 - C. Sampling procedures for Fuel Volatility, 40 CFR 80 Appendix D [35 IAC 218.585(d)(3)].
 - ii. The Reid vapor pressure of gasoline shall be measured in accordance with either test method ASTM D323 or a modification of ASTM D323 known as the "dry method" as set forth in 40 CFR 80, Appendix E. For gasoline - oxygenate blends which contain water-extractable oxygenates, the Reid vapor pressure shall be measured using the dry method test [35 IAC 218.585(e)].
 - iii. The ethanol content of ethanol blend gasolines shall be determined by use of one of the approved testing methodologies specified in 40 CFR 80, Appendix F [35 IAC 218.585(f)].

7.2.8 Monitoring Requirements

None

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 tanks to demonstrate compliance with Conditions 5.5.1 and 7.2.3 pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of the affected tanks pursuant to Condition 7.2.7, which include the following [Section 39.5(7)(e) of the Act]:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analysis; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of this Part other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel [35 IAC 218.129(f)].
- c. Design information for the tank showing the presence of a permanent submerged loading pipe;
- d. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- e. The throughput of the affected tanks, gal/mo and gal/yr; and
- f. The annual VOM emissions from the affected tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected tank 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:

- a. Any storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.2.3(b) and (c)(i) (see also 35 IAC 218.122(b) and 218.583(a)(1)), e.g. no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;
- b. Any storage of VOL in an affected tanks that is out of compliance with the requirements of Conditions 7.2.3(b) and (c)(I) (see also 35 IAC 218.122(b) and 218.583(a)(1)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause of non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;
- c. Upon request by the Illinois EPA, the owner or operator of a gasoline dispensing operation which claims to be exempt from the requirements of 35 IAC 218.586 shall submit records to the Illinois EPA within 30 calendar days from the date of the request which demonstrate that the gasoline dispensing operation is in fact exempt; and
- d. The storage of any VOL or VPL other than the material specified in Condition 7.2.5(a) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from each affected tank, the current version of the TANKS program is acceptable.

7.3 Unit 03 - Boilers
Control None

7.3.1 Description

Six natural gas/digester gas fired boilers used to generate steam for heating, cooling, and process heat.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
03	Gas Boilers B1 & B2 (45.9 mmBtu/hr firing rate)	B1 and B2 - 3/80	Hydrogen Sulfide Removal System for digester gas mode
	Gas Boilers B3, B4, and B5 (94.15 mmBtu/hr firing rate)	B3, B4, and B5 - 1/85	
	Gas Boiler B7 (79.17 mmBtu/hr firing rate)	B7 - 12/97	

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected boiler" for the purpose of these unit-specific conditions, is each natural gas fired boiler listed in condition 7.3.2.
- b. Affected boiler B7 is subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Subpart Dc because the boiler is constructed after June 9, 1989 and the firing rates of the affected boiler is less than 100 mmBtu/hr and greater than 10 mmBtu/hr.
- c. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from the affected boilers to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- d. The affected boilers are subject to the applicable regulations identified in Condition 5.2.2.

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected boilers B1, B2, B3, B4, and B5 are not subject to NSPS, 40 CFR 60 Subpart Dc, Industrial-Commercial-Institutional Steam Generating Units, because each steam generating unit was constructed,

modified, or reconstructed prior to the applicability date of June 9, 1989.

- b. This permit is issued based upon the affected boilers not being subject to 35 IAC 217.121, New Emission, since the actual heat input of each boiler is less than 73.2 MW (250 mmBtu/hr).
- c. This permit is issued based upon the affected boilers not being subject to 35 IAC 215.301, because the affected boilers are fuel combustion emission units and are exempt pursuant to 35 IAC 215.303.
- d. This permit is issued based upon the affected boilers not being subject to 35 IAC 214.301, 212.321, or 212.322 because the affected boilers are not by definition considered to be process emission units, reference 35 IAC 211.510 Process Unit.

7.3.5 Operational and Production Limits and Work Practices

Natural gas or digester gas shall be the only fuel fired in the affected boilers.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected boilers are subject to the following when combusting natural gas, digester gas, or a combination of natural/digester gas:

- a. Operations and emissions of affected boilers B3, B4, and B5 shall not exceed the following limits:

PM (ton/mo)	SO ₂ (ton/mo)	NO _x (ton/mo)	VOM (ton/mo)	CO (ton/mo)
.80	7.35	10.5	.59	8.8

PM (ton/yr)	SO ₂ (ton/yr)	NO _x (ton/yr)	VOM (ton/yr)	CO (ton/yr)
7.4	68.6	98	5.5	82.3

These limits are based on the following:

Monthly limits are based on the maximum firing rate and maximum monthly hours of operation and yearly limits are based on the amount of natural gas and digester gas combusted as determined by the recordkeeping in Condition 7.3.9(a) and (c) and the

emission factors and formula in Condition 7.3.12 so as to not trigger PSD.

- b. Operations and emissions of affected boiler B7 shall not exceed the following limits:

PM (ton/mo)	SO ₂ (ton/mo)	NO _x (ton/mo)	VOM (ton/mo)	CO (ton/mo)
.22	2.1	2.9	.16	2.5

PM (ton/yr)	SO ₂ (ton/yr)	NO _x (ton/yr)	VOM (ton/yr)	CO (ton/yr)
2.6	24.3	34.6	1.9	29.1

Monthly and annual limits are based on the maximum firing rate of the boiler, maximum hours of operation, and the emission factors in Condition 7.3.12(b).

The above limitations contain revisions to previously issued construction permit 97100018. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this construction permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the emission limitations in this construction permit have been updated to reflect the latest emission factors found in the AP-42 publication. In addition, boilers B3, B4, and B5 have been assigned emission limits to avoid PSD. [T1R]

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) [T1R].

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

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 and 7.3.3, pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas usage for the affected boilers B3, B4, and B5 (mmscf/mo and mmscf/yr).
- b. Natural gas usage for all affected boilers (mmscf/mo and mmscf/yr).
- c. Digester gas usage for the affected boilers B3, B4, and B5 (mmscf/mo and mmscf/yr).
- d. Digester gas usage for all affected boilers (mmscf/mo and mmscf/yr).
- e. Annual aggregate NO_x, PM, CO, SO₂, and VOM emissions from affected boilers B1, B2, B3, B4, B5, and B7, based on fuel consumption and the applicable emission factors and formulas in Condition 7.3.12, with supporting calculations.
- f. Annual aggregate NO_x, PM, CO, SO₂, and VOM emissions from the affected boilers B3, B4, and B5 based on fuel consumption and the applicable emission factors and formulas in Condition 7.3.12, with supporting calculations.
- g. Natural gas and digester gas usage for boiler B7 (mmscf/mo and mmscf/yr).

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance 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:

- a. Emissions of NO_x, PM, CO, SO₂, or VOM from affected boilers B3, B4, and B5 in excess of the limits specified in Conditions 5.5.1 and 7.3.6.
- b. Emissions of carbon monoxide into the atmosphere from an affected boiler in excess of the limits specified in Condition 7.3.3(c).

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.3(c) is assumed to be achieved by work-practices inherent in the operation of natural gas fired boilers, so that no compliance procedures are set in this permit addressing this regulation.
- b. Compliance with the emission limits in Condition 5.5.1 and 7.3.6 from the affected boilers shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

Table 1. For natural gas fired boilers with firing rate greater than 10 mmBtu/hr and less than 100 mmBtu/hr.

Pollutant Type	Emission Factor (lb/mmscf)
NO _x	100
CO	84
VOM	5.58
PM	7.6
SO ₂	0.6

Emission factors are based on the maximum firing rate of an individual boiler, Tables 1.4-1 and 1.4-2 of AP-42, Fifth Edition, Volume 1, January 1995 with respective updates in February and March 1998.

Table 2. For digester gas fired boilers with firing rate greater than 10 mmBtu/hr and less than 100 mmBtu/hr.

Pollutant Type	Emission Factor (lb/mmscf)
NO _x	60
CO	50.4
VOM	3.3
PM	4.6
SO ₂	42

Emission factors are based on the maximum firing rate of an individual boiler, Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume 1, January 1995 with respective updates in February and March 1998 and adjusted for the heat content of digester gas of 600 BTU/scf. Digester gas SO₂ emission factor are generated from the following special report EBMUD, AB2588 Air Emissions Inventory Report 1991, emissions from boilers that burn digester gas.

Emissions (ton) = {[natural gas usage (mmscf) x the appropriate emission factor (lb/mmscf)] + [digester gas usage (mmscf) x the appropriate emission factor (lb/mmscf)]}/2000 lb/ton

7.4 Unit 04 - Waste Gas Burners
Control None

7.4.1 Description

The waste gas burners are used as flares to combust excess digester gas. Waste digester gas is generated from the sludge digestion process. Combustion of the waste gas is necessary in order to reduce the hazard of explosion.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
04	Waste Gas Burner Units WGB1 (six identical units with maximum firing rate of 13.35 mmBtu/hr), WGB2 (six identical units with maximum firing rate of 13.35 mmBtu/hr)	WGB1 - 7/90 WGB2 - 5/90	None

7.4.3 Applicability Provisions and Applicable Regulations

- a. An affected flare for the purpose of these unit-specific conditions, is waste gas burner units WGB1 and WGB2 as described in Condition 7.4.2.
- b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from an affected flare to exceed 2000 ppm [35 IAC 214.301].
- c. The affected flares are subject to the applicable regulations identified in Condition 5.2.2.

7.4.4 Non-Applicability of Regulations of Concern

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

7.4.5 Operational and Production Limits and Work Practices

None

7.4.6 Emission Limitations

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

- a. Operation and emissions of each affected flare WGB1 and WGB2 shall not exceed the following limits:

Emission Unit	VOM (lb/mo)	VOM (ton/yr)	NO _x (lb/mo)	NO _x (ton/yr)
WGB1	1365	8.19	585	3.51
WGB2	1365	8.19	585	3.51

The above limitations contain revisions to previously issued construction permit 88040052. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this construction permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, original limitations of 0.4 ton/yr (NO_x) and 0.1 Ton/yr (CO) were established in Construction Permit 88040052. Limits for NO_x, have been increased to limitations shown in Condition 7.4.6 (a) which are contained in the CAAPP application. [T1R]

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). [T1R]

7.4.7 Operating Requirements

None

7.4.8 Inspection 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 flares to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Digester gas usage for the affected flares, mmscf/mo and mmscf/yr.
- a. Annual aggregate NO_x, PM, SO₂, and VOM emissions from the affected flares, based on fuel consumption and the applicable emission factors, with supporting calculations.
- b. Monthly NO_x and VOM emissions from each affected flare, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected flare 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:

- a. Emissions of NO_x, PM, SO₂, or VOM from an affected flare in excess of the limits specified in Condition 5.5.1 and 7.4.6.
- b. Emissions of sulfur dioxide into the atmosphere from an affected flare in excess of the limits specified in Condition 7.4.3(b).

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the emission limits in Condition 5.5.1 and 7.4.6 from the affected flares shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

Table 1. For digester gas fired flares with firing rate greater than 10 mmBtu/hr and less than 100 mmBtu/hr.

Pollutant Type	Emission Factor (lb/mmscf)
NO _x	36
CO	330
VOM	84
PM	0
SO ₂	42

Emissions are determined using the special emission factors provided above. The SO₂ Emission Factor comes from the report, EDMUD, AB2588 Air Emissions Inventory Report 1991, emissions from boilers that burn digester gas with the remaining emission factors from the Texas Air Control Board.

Emission (ton) = individual flare's gas usage (mmscf) x the applicable emission factor (lb/mmscf) x conversion factor (ton/2000 lb)

7.5 Unit 05 - Holding Tanks
Control None

7.5.1 Description

Digester holding tanks store sludge before and after anaerobic digestion.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
06	Digester Holding Tanks (1-12)	1-4 1963 5-8 1968 9-12 1992	None

7.5.3 Applicability Provisions and Applicable Regulations

- a. The "affected holding tanks" for the purpose of these unit-specific conditions, are digester holding tanks 1 through 12 as described by Condition 7.5.2.
- b. The affected holding tanks are subject to the applicable regulations identified in Condition 5.2.2.

7.5.4 Non-Applicability of Regulations of Concern

N/A

7.5.5 Operational and Production Limits and Work Practices

None

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected holding tanks are subject to the following:

Emissions from the holding tanks shall not exceed the following limits:

VOM Emissions (lb/mo)	VOM Emissions (ton/yr)
1,483	8.9

The above limitations are being established in this permit pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of

Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions from the holding tanks below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application. [T1N]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1N]

7.5.7 Testing Requirements

N/A

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected holding tanks to demonstrate compliance with condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. The influent wastewater flow, million gal/day; and
- b. The annual VOM emissions from the affected holding tanks based on the influent wastewater flow and the applicable emission factors and formulas with supporting calculations.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected holding tank 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:

The affected holding tanks are subject to the reporting requirements identified in Condition 5.7.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

Compliance with the emission limits in Condition 5.5 and 7.5.6 from the affected holding tanks shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected holding tanks, the JEIP emission factor of 14.8 lbs/yr/mgd, defined in the February 1998 Emission Reduction Marketing System (ERMS) application, will be used to estimate emissions. The JEIP system was developed by the South Coast Air Quality Management District (SCAQMD) based on SCAQMD Rule 1179 Emissions Inventory Report for JEIP.

VOM Emissions (ton/yr) = (influent flow (mgd)*14.8
lb/yr*mgd)/2000 lb/ton

7.6 Unit 06 - Gas Turbine
Control Hydrogen Sulfide Removal System

7.6.1 Description

A gas turbine is used to power an electric generator and provide electricity at the source. The gas turbine is a digester gas fired turbine.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
06	Gas Turbine DC-990 (maximum firing rate of 41.66 mmBtu/hr)	7/86	Hydrogen Sulfide Removal System

7.6.3 Applicability Provisions and Applicable Regulations

- a. An "affected gas turbine" for the purpose of these unit-specific conditions is a gas turbine that is 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 gas turbine commenced construction, modification, or reconstruction after October 3, 1977, and that has a peak load less than or equal to 107.2 gigajoules per hour (100 mmBtu/hr). The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

b. i. Standard for Nitrogen Oxide

- A. Pursuant to 40 CFR 60.332 (a)(2), no owner or operator of an affected gas turbine shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

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

Y = manufacturer's rated heat rate at manufacturer's rated peak 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 as defined in paragraph (a)(3) of this section.

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 accordance with Condition 7.6.8.

ii. Standard for Sulfur Dioxide

- A. No owner or operator subject to the provisions of 40 CFR 60 Subpart GG 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)].
- B. No owner or operator subject to the provisions of 40 CFR 60 Subpart GG 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)].
- C. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in Section 218.302, 218.303,

218.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 218.301].

7.6.4 Non-Applicability of Regulations of Concern

- a. The affected turbine is not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected gas turbine is not by definition a fuel combustion emission unit.
- b. The affected gas turbine is not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of each unit is less than 73.2 MW (250 mmBTU/hr) and the affected gas turbine is not by definition a fuel combustion emission unit.
- c. This permit is issued based on the affected gas turbine not being subject to 35 IAC 212.321 because due to the unique nature of this process, such rules cannot reasonably be applied.

7.6.5 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 gas turbine 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. The affected gas turbine shall only be fired with digester gas.

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected gas turbine is subject to the following:

Operations and emissions of the affected gas turbine shall not exceed the following limits:

PM (ton/mo)	SO ₂ (ton/mo)	NO _x (ton/mo)	VOM (ton/mo)	CO (ton/mo)
.34	.053	3.25	.30	2.43

PM (ton/yr)	SO ₂ (ton/yr)	NO _x (ton/yr)	VOM (ton/yr)	CO (ton/yr)
4.12	.639	39.0	3.65	29.2

The above limitations contain revisions to previously issued construction permit 88030009. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this construction permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, original limitations of 30.3 ton/yr (NO_x), 2.5 ton/yr (VOM) and 20.2 ton/yr (CO) were established in Construction Permit 88030009. These limits have been changed to reflect emission limits in the Title V application without a PSD violation. [T1R]

7.6.7 Testing Requirements

- a. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired [40 CFR 60.335(a)].
- b. To meet the requirements of Condition 7.6.8 (see also 40 CFR 60.334(b)), the owner or operator shall use the methods specified in Conditions 7.6.7(a) (see also 40 CFR 60.335(a) and (d)) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner

or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency [40 CFR 60.335(e)].

7.6.8 Monitoring Requirements

Pursuant to 40 CFR 60.334(b), the Permittee shall monitor sulfur content and nitrogen content of the fuel being fired in an affected gas turbine. The frequency of determination of these values shall be as follows:

For digester gas, which is supplied without intermediate bulk storage the values shall be determined and recorded every 6 months. This is a custom schedule for determination of the values based on the design and operation of the affected gas turbine and the characteristics of the fuel supply, substantiated with data submitted to and approved by the Illinois EPA [40 CFR 60.334(b)(2)].

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6 and 5.7, the Permittee shall maintain records of the following items for the affected gas turbine to demonstrate compliance with Conditions 5.5.1, 7.6.3, and 7.6.5 pursuant to Section 39.5(7)(b) of the Act:

- a. An operating log for the affected gas turbine that includes the information required by Condition 5.7.3(a).
- b. A file that includes the information required by Condition 5.7.3(b), including the nitrogen content of the fuel relied upon, if greater than zero, to determine the applicable standard pursuant to Condition 7.6.3(b)(i) and show compliance with such standard and the emission limit pursuant to Condition 7.6.6.
- c. Digester gas fuel usage for the affected gas turbine, mmscf/mo and mmscf/yr.
- d. The nitrogen content of the fuel to be used in the gas turbine as follows:

For digester gas, this shall be recorded on a daily basis, except as provided in Condition 7.6.8.

- e. The sulfur content of the fuel to be used in the affected gas turbine as monitored pursuant to Condition 7.6.8.
- f. Monthly and annual aggregate NO_x, PM, SO₂, and VOM emissions from the affected gas turbine shall be maintained, based on fuel consumption and the applicable emission factors in Condition 7.6.12, with supporting calculations.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Pursuant to 40 CFR 60.334(c), periods of excess emissions that shall be reported are defined as follows:

- i. Nitrogen Oxides

- Any period in which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required by Condition 7.6.7(a). Each report shall include the average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under Condition 7.6.7(a) (see also 40 CFR 60.335(a)) [40 CFR 60.334(c)(1)].

- ii. Sulfur Dioxide

- Any daily period during which the sulfur content of the fuel being fired in the gas turbine may not comply with Condition 7.6.3(b)(ii) [40 CFR 60.334(c)(2)].

- b. Emissions of NO_x from the affected gas turbine in excess of the limits specified in Condition 7.6.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

- a. Compliance with Condition 7.6.3(b)(ii) is assumed to be achieved by the normal work practices and maintenance activities inherent in the operation of a gas fired turbine.
- b. Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.6.9 and the emission factors and formulas listed below:

Digester gas Combustion Emissions

To determine compliance with Condition 5.5.1, the digester gas combustion emissions from the affected gas turbine shall be calculated based on the following special emission factors based upon the heat content of digester gas of 600 Btu/scf. CO, NO_x, and VOM emission factors are from a shop test as listed in a permit application dated 2/23/88. The SO₂ emission factor is from a report EBMUD, AB2588 Air Emissions Inventory Report 1991, emissions from boilers that burn digester gas. Particulate matter emission factor is from AP-42 Emission factors for Large Uncontrolled Gas Turbines for condensable particulate matter.

Pollutant	Emission Factor (lb/mmscf)
NO _x	144
PM	13.6
CO	96
SO ₂	42
VOM	12

Emissions (lb) = (Digester Gas Consumed, ft³)
x (Heat Content, BTU/ft³) x (The appropriate
Emission Factor, lb/mmBtu)

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 September 30, 1999 (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 without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA,

emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change, and 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 [Section 39.5(12)(a) of the Act]. This notice shall:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. 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;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. 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

A report summarizing required monitoring 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]:

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

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

8.6.2 Test Notifications

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

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific 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 (MC 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
Eisenhower Tower
1701 South First Avenue
Maywood, Illinois 60153

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 (AR - 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)(p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants; 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.

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 Emissions of Particulate Matter from New Process Emission Units

10.1.1 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

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

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

where:

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

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

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

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

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

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

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.3	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

10.2.1 Process Emission Units for Which Construction or Modification Commenced Prior to After April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

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

where:

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

- i. Up to process weight rates up to 27.4 Mg/hr (30 T/hr):

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

- ii. For process weight rate in excess of 27.4 Mg/hr (30 T/hr):

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

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

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.4	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

10.3 Attachment 3 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: _____

MJK:psj