

PROPOSED CAAPP PERMIT  
TC Industries, Inc.  
I.D. No.: 111813AAE  
Application No.: 96030116  
December 2, 1999

217/782-2113

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE

TC Industries, Inc.  
Attn: Hank Deveikis, Environmental Director  
3703 South Route 31  
Crystal Lake, Illinois 60012

Application No.: 96030116                      I.D. No.: 111813AAE  
Applicant's Designation:                      Date Received: March 7, 1996  
Operation of: Heat Treating and Steel Fabrication  
Date Issued: TO BE DETERMINED                      Expiration Date<sup>2</sup>: DATE  
Source Location: 3703 South Route 31, Crystal Lake, McHenry County  
Responsible Official: Hank Deveikis, Environmental Director

This permit is hereby granted to the above-designated Permittee to OPERATE a Heat Treating and Steel Fabrication plant, 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 Mangu Patel at 217/782-2113.

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

DES:MJP:jar

cc: Illinois EPA, FOS, Region 1  
USEPA

<sup>1</sup> 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.

<sup>2</sup> Except as provided in condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

TC Industries, Inc.  
Attn: Hank Deveikis, Environmental Director  
3703 South Route 31  
Crystal Lake, Illinois 60012  
815/459-2400 Ext. 279

I.D. No.: 111813AAE  
Standard Industrial Classification: 3398, Metal Fabrication

1.2 Owner/Parent Company

TC Industries, Inc.  
3703 South Route 31  
Crystal Lake, Illinois 60012

1.3 Operator

TC Industries, Inc.  
Attn: Hank Deveikis, Environmental Director  
3703 South Route 31  
Crystal Lake, Illinois 60012  
815/459-2400 Ext. 279

1.4 General Source Description

TC Industries, Inc. is located at 3703 South Route 31, Crystal Lake in McHenry County. The source manufactures steel parts which are used in a variety of applications. Typically, the parts produced are used as cutting edges, bits and various other applications by heavy construction equipment such as bulldozers, scrapers, loaders, graders, etc. Steel is processed in a variety of ways, including cutting, grinding, heat treating, quenching and coating. The quenching and coating operations are primary sources of VOM emissions at the plant.

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2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ACMA	Alternative Compliance Market Account
ATUs	Allotment Trading Units
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emission Reduction Market System
°F	degrees Fahrenheit
Ft <sup>3</sup>	cubic foot
Gal	Gallon
Gm	Gram
HAP	Hazardous Air Pollutant
Hp	horse power
Hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilo gram
KW	Kilowatts
Lb	Pound
MACT	Maximum Available Control Technology
Mmcf	Million cubic feet
MG	Mega Gram
M	Meter
MmBtu	Million British thermal units
Mo	Month
MW	Mega Watts
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
OM	Organic Material
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods

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ppm	parts per million
PSD	Prevention of Significant Deterioration
Psia	pounds per square inch absolute
Scf	standard cubic foot
SO <sub>2</sub>	Sulfur Dioxide
T	Ton
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
Wt.	Weight
Yr	Year

### 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:

- 1 Plasma Cutting
- 5 Oxy Fuel Torches
- 9 Punch Presses
- 3 Polymer Quench
- 7 Water Quench
- 2 ARM Welding
- Approximately 10 Maintenance Welding
- 1 Polymer Storage Tank
- 1 Butter Bead Welder
- 56 Cutting and Machining Operations
- 1 Diesel Storage Tank

##### 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:

- 14 IR heaters

##### 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)].

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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)].

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)].

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

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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).

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4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Plant Emission Unit	Emission Unit Description	Date Constructed	Emission Control
01	AC	5 Heat Treating Furnaces, Heat Inputs Between 10 and 100 mmBtu/hr	Prior 1988	None
	AD	18 Heat Treating Furnaces, Heat Inputs Between 0.3 and 10 mmBtu/hr	Prior 1988 <sup>a</sup>	None
02	AG	Oil Quenching Operation	Prior 1972	None
	AG-2	Oil Quenching Operation No. 2	December 1997	None
03	AI	#4 Blaster Wheelabrator	Prior 1988	Torit Day Dust Collector
		#7 Blaster Wheelabrator	Prior 1988	Wheelabrator Dust Collector
		#8 Blaster Wheelabrator	Prior 1988	Torit Day Dust Collector
		#2 Blaster Wheelabrator	Prior 1988	Wheelabrator Dust Collector
04	AK	Flow Coat Painting and Gas Drier	April 1988	None
05	AL	Hand Spray Painting	Prior 1988	None
06	AM	Paint Burn-Off Oven	January 1989	Afterburner
07	AN	Brule Model: FG4-T8H	Prior 1988	Afterburner
08	AP	Office Boiler	May 1989	None
	AQ	1 MP Line Boiler	September 1993	None
	AR	4 & 5 MP Line Boiler	October 1995	None
	AS	Mapleton Boiler	October 1995	None
		Iron Phos Treat Boiler	April 1988	None
	AK	No-Chrome Rinse Boiler	April 1988	None
09	AO	0.44 mmBtu/hr Water Heater	April 1995	None
10	AT	1-2,500 Gallon Gasoline Storage Tank	January 1991	Submerged Loading

<sup>a</sup>. Heat treat furnaces 60-8 and 60-9 were constructed October, 1995.

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 VOM emissions.

5.2 Applicable Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

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

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 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.

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- 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.

5.3 Non-Applicability of Regulations of Concern

None

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)	74.58
Sulfur Dioxide (SO <sub>2</sub> )	---
Particulate Matter (PM)	42.86
Nitrogen Oxides (NO <sub>x</sub> )	83.44
HAP, not included in VOM or PM	3.40
TOTAL	204.28

5.5.2 Emissions of Hazardous Air Pollutants

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

5.5.3 Other Source-Wide Emission Limitations

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 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 as soon as is reasonably practical 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.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

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

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## 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)]:

Fuel combustion units and oil quenching operation.

- 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

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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 145 ATUs per seasonal allotment period.

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- ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 16.34 tons per season.
    - A. This determination includes the use of 1993 and 1997 as baseline seasons. This determination includes use of the 1993 and 1997 seasons as a substitute for the 1994 and 1995 seasons due to non-representative conditions in this season, as allowed by 35 IAC 205.320(a)(2).
  - 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

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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

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emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.405(a) and (c)]:

Emission units excluded from further reduction:

Emission Unit	Plant Emission Unit	Emission Unit Description
02	AG	Oil Quenching Operation
	AG-2	Oil Quenching Operation No. 2
08	AP	Office Boiler
	AQ	1 MP Line Boiler
	AR	4 & 5 MP Lines Boiler
	AS	Mapleton Boiler
		Iron Phos Treat Boiler
09	AO	0.44 mmBtu/hr Water Heater

- 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)]:

None

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01 - Heat treating furnaces

7.1.1 Description

Heat treating furnaces are used to harden and relieve stresses in the steel parts produced at the plant. All of the furnaces are natural gas fired.

7.1.2 List of Emission Units and Pollution Control Equipment

Plant Emission Unit	Description	Natural Gas Fired Furnaces		Control Equipment
		Quantity	mmBtu/hr	
AC	5 Heat Treat Furnaces, Heat Inputs Between 10 and 100 mmBtu/hr	1	10.1	None
		1	10.2	
		3	13.0	
AD	18 Heat Treat Furnaces, Heat, Inputs Between 0.3 and 10 mmBtu/hr	1	1.0	None
		2	2.0	
		1	3.2	
		1	3.5	
		1	4.0	
		1	4.7	
		1	5.0	
		1	5.1	
		2	6.4	
		2	6.5	
		3	7.0	
		1	8.0	
		1	8.2	

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected heat treating furnace" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.1.1 and 7.1.2.
- b. Each affected heat treating furnace is subject to 35 IAC 212.321, which provides that:

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 (see also Attachment 1) [35 IAC 212.321(a)].

- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from an affected heat treating furnace, except as provided in Sections 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].
- d. Each affected heat treating furnace is subject to the emission limits identified in Condition 5.2.2.

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. The affected heat treating furnace not subject to 35 IAC 217.121 for 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 heat treat furnace is not by definition a fuel combustion emission unit.
- b. The affected heat treating furnace is not being subject to 35 IAC 216.121 because each affected heat treat furnace is not by definition a fuel combustion emission unit.
- c. The affected heat treating furnace is not subject to 35 IAC 214.301 because process emissions of sulfur dioxide from each affected heat treat furnace are so small that this rule cannot be reasonably 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 and 7.2.3, the

affected heat treating furnace is subject to the following:

None.

Emission limits for PM, NO<sub>x</sub> and CO are not set for the heat treating furnaces 60-8 and 60-9, as potential to emit in the absence of permit limit is less than the significant and major source thresholds for these pollutants pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

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 heat treating furnace to demonstrate compliance with Conditions 5.5.1 pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas usage (mmcf/yr).
- b. Fuel combustion emissions (ton/yr) as calculated by Section 7.1.12.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected heat treat furnace 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 PM or VOM from an affected heat treating furnace in excess of the limits specified in Condition 7.1.3, within 30 days of such an occurrence

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance provisions addressing condition 7.1.3 are not set by this permit as compliance is assumed to be achieved by the normal work practices and maintenance activities inherent in operation of each affected heat treating furnace.
- b. Compliance with the emission limits in Condition 5.5 from each affected heat treating furnace shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

Pollutant	Emission Factor lbs/10 <sup>6</sup> scf
NO <sub>x</sub>	100
PM	7.6
VOM	5.5

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, March, 1998.

Emissions (ton/yr) = (natural gas usage, mmcf/yr) x (the applicable emission factor, lb/mmcf) x (ton/2000 lb)

7.2 Unit 02: Oil Quenching Operations

7.2.1 Description

Oil quenching consists of immersing the steel part in a pool of petroleum based oil immediately after removing from a heat-treating furnace to increase the hardness of the steel.

7.2.2 List of Emission Units and Pollution Control Equipment

Plant Emission Unit	Description	Emission Control Equipment
AG	Oil Quenching Operation	None
AG-2	Oil Quenching Operation No.2	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected oil quenching operation" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.2.1 and 7.2.2.
- b. The owner or operator shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from the affected oil quenching operation [35 IAC 218.301]. If no odor nuisance exists this limitation shall apply only to photochemically reactive material.
- c. Affected oil quenching operation (AG) is subject to 35 IAC 212.322(a), which provides that:

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)].

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- d. Affected oil quenching operation No.2 (AG-2) is subject to 35 IAC 212.321(a), which provides that:

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 (see also Attachment 1) [35 IAC 212.321(a)].

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected oil quenching operation is considered to be part of iron or steel production (as supported by the major SIC of the source of 33), it is not subject to Subpart TT of 35 IAC, part 218 based on 218.980(f).
- b. The affected oil quenching operation is not subject to the requirements of 35 IAC 214.301 because the affected oil quenching operation does not emit SO<sub>2</sub>, and thus, this rule cannot be reasonably applied.
- c. The affected oil quenching operation is not being subject to the requirements of 35 IAC 216.121 or 35 IAC 217.121 because the affected oil quenching operation is not by definition a fuel combustion emission unit.

7.2.5 Operational and Production Limits and Work Practice Requirements.

N/A

7.2.6 Emission Limitations

In addition to Condition 5.2.2, and the source-wide emission limitations in Condition 5.5 and 7.2.3, the affected oil quenching operation No.2 (AG-2) is subject to the following:

- a. Emissions from the oil quenching operation No.2 (AG-2) shall not exceed the following limits:

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Source	VOM (T/yr)	PM (T/yr)
Quench tank*	0.19	2.76
From Bars	0.931	4.41
Draw furnace**	0.02	0.013

These limits are based upon maximum quench oil make-up 73.86 tons/year and 8,760 hours of operation as indicated in the permit application.

\* Includes emissions from evaporation from the static oil surface of the tank and combustion from immersion of heated bars into the oil.

\*\* Existing draw furnace

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

The above limitations were established in permit 97080041, pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules [T1].

Emission limits for NO<sub>x</sub> and CO are not set for the affected oil quenching operation No.2 (AG-2), as potential to emit in the absence of permit limit is less than the significant and major source thresholds for these pollutants pursuant to the aforementioned rules.

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

N/A

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 oil quenching operation to demonstrate compliance with Conditions 5.5.1 pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of quench oil purchased (lbs/mo, lbs/yr);
- b. Density of quench oil purchased (lbs/gallon);
- c. Hours of operation (hrs/mo, hrs/yr); and
- d. VOM and PM emissions (lbs/mo, lbs/yr) as calculated by Condition 7.2.12.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected oil quenching operation 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. Photochemically reactive material emissions into the atmosphere in excess of the emission limit specified in Condition 7.2.3(b) within 30 days of such an occurrence; and
- b. Emissions of VOM from the affected oil quenching operations in excess of the limits specified in Condition 5.5.1 and 7.2.6 based on the current month's record plus the preceding 11 months within 30 days of such an occurrence.

7.2.11 Operational Flexibility

N/A

7.2.12 Compliance Procedures

Compliance with the emission limits in Condition 7.2.3 and 5.5 from the affected oil quenching operation shall be

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based on the recordkeeping requirements in Condition 7.2.9  
and utilizing pollutant-source specific information from  
condition 7.2.6.

7.3 Unit 03 Steel Shot Blasting with Baghouse (BG-5T)

7.3.1 Description

Steel shot blasting is used to clean certain parts. In this method, small steel beads (shot) are impinged against the surface of the part at high velocity. The physical action of the shot against the part surface cleans and polishes it.

7.3.2 List of Emission Units and Pollution Control Equipment

Plant Emission Unit	Description	Emission Control Equipment
AI	#4 Blaster Wheelabrator	Torit Day Dust Collector
	#7 Blaster Wheelabrator	Wheelabrator Dust Collector
	#8 Blaster Wheelabrator	Torit Day Dust Collector
	#2 Blaster Wheelabrator	Wheelabrator Dust Collector

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected shot blasting operation" for purposes of these unit specific conditions is an emission unit described in conditions 7.3.1 and 7.3.2.
- b. The affected shot blasting operation is subject to 35 IAC 212 Subpart K "Fugitive Particulate Matter". The requirements of this subpart are listed in Section 5.2.2 (a).

7.3.4 Non-Applicability of Regulations of Concern

Each affected shot blaster is not subject to 35 IAC 212.321 and 212.322, "Particulate matter Emissions from New or Existing Process Emission Sources", pursuant to 35 IAC 212.681.

7.3.5 Operational and Production Limits and Work Practices

The Permittee shall operate, and maintain the dust collector, including periodic inspection, routine

maintenance and prompt repairs of defects, if any, that assures compliance with the conditions of this section.

7.3.6 Emission Limitations

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

None

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 shot blaster to demonstrate compliance with Conditions 5.5.1 pursuant to Section 39.5(7)(b) of the Act:

- a. Hours of operation (hrs/yr);
- b. Records addressing use of good operating practices for the baghouses:
  - i. Records for periodic inspection of the dust collectors with date, individual performing the inspection, and nature of inspection.
  - ii. Records of prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- c. PM emissions (ton/yr) as calculated by Condition 7.3.12.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of each affected shot blaster 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. PM emissions from an affected shotblaster in excess of the limits specified in Condition 7.3.3, within 30 days of such occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance provisions addressing condition 7.3.3 are not set by this permit as compliance is assumed to be achieved by the normal work practices and maintenance activities inherent in operation of each affected shot blaster and dust collector.
- b. Compliance with the emission limits in Condition 5.5 from each affected shot blaster shall be based on the recordkeeping requirements in Condition 7.3.9 and the formulas listed below:

PM Emissions = (controlled emission rate 0.32 lb/hr\*)  
x (hours of operation)/(2,000 lb/T)

- \* Hourly emission rate from application based on material balance and 99% baghouse control.

7.4 Unit 04: Flow coat painting

7.4.1 Description

After preliminary metal fabrication, parts are painted using an automated flow coat operation. The coated parts are dried in a natural gas fired drier.

7.4.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Control Equipment
AK	Flow Coat Painting and Gas Drier	None

7.4.3 Applicability Provisions and Applicable Regulations

a. An "affected flow coating operation" for the purpose of these unit-specific conditions is a Flow coat painting with gas drier described in conditions 7.4.1 and 7.4.2.

b. The affected flow coating operation at the source is subject to 35 IAC 218.204(j)(2) (B) for baked and extreme performance coating, which provides that:

i. No owner or operator of an affected flow coating operation shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the coating as applied to Miscellaneous Metal Parts and Products. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

<u>kg/liter</u>	<u>lb/gal</u>
0.40	3.3

ii. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.

- c. The affected flow coating operation is subject to 35 IAC 212.321(a), which requires that:

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 (see also Attachment 1)[35 IAC 212.321(a)].

#### 7.4.4 Non-Applicable Regulations of Concern

- a. The affected flow coating operation is not subject to 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material which excludes the affected flow coating operation from this requirement.
- b. The affected flow coating operation is not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the affected flow coating operation is not by definition a fuel combustion emission unit.
- c. The affected flow coating operation is not subject to 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Sources, because the affected flow coating operation is not by definition a fuel combustion emission unit.
- d. The affected flow coating operation is not subject to the requirements of 35 IAC 214.301 because the affected flow coating operation does not emit SO<sub>2</sub>, and thus, this rule cannot be reasonably applied.

#### 7.4.5 Operational and Production Limits and Work Practices

The affected flow coating operation with drying oven shall only be operated with natural gas as the fuel.

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#### 7.4.6 Emission Limitations

In addition to Condition 5.2.2, the source-wide limitations in Condition 5.5, and the VOM content limitations of Condition 7.4.3(c), the affected flow coating operation is subject to the following:

Emissions of VOM from the affected flow coating operation, excluding emissions from the fuel combustion, shall not exceed 6.00 tons/month and 51.80 tons/yr [T1N].

This limit is based on the amount of coating used (gal), the VOM content of the coating (% by Wt), the coating density (lb/gal), and no emissions from clean-up solvent.

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].

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 emissions limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected flow coating operation below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

#### 7.4.7 Testing Requirements

Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used on the affected flow coating shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a), 218.208 and 218.211(a).

- a. The VOM content of representative coatings "as applied" on the affected flow coating shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a);

- b. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.4.9(b) directly reflect the application of such material and separately account for any additions of solvent. [35 IAC 218.105(a), 218.208, and 218.211(a)]

7.4.8 Inspection Requirements

N/A

7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected flow coating operation to demonstrate compliance with this section, pursuant to Section 39.5(7)(b) of the Act:

- a.
  - i. The name and identification number of each coating as applied on the affected flow coating;
  - ii. The usage of each coating (gal/mo and gal/yr);
  - iii. Density of each coating (lb/gal);
  - iv. VOM content of each coating (wt %);
  - v. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month on the affected flow coating; and
- b. Records of the testing of VOM content (in wt. %) of each coating and cleaning solvent as tested pursuant to the conditions of this section, which include the following [Section 39.5(7)(e) of the Act]:
  - i. Identification of material tested;
  - ii. Results of analysis;

- iii. Density of each coating (lb/gal);
  - iv. VOM content of each coating (wt. %);
  - v. Documentation of analysis methodology; and
  - vi. Person performing analysis.
- c. VOM emissions (tons/mo and tons/yr) as calculated by Condition 7.4.12;
  - d. Use of natural gas (mmcf/yr); and
  - e. Fuel combustion emissions (ton/yr) as calculated by Condition 7.4.12.

#### 7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected flow coating 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. Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.4.3(b) (see also 35 IAC 218.204(j)) within 30 days of such an occurrence.
- b. Emissions of VOM from an affected flow coating in excess of the limits specified in Condition 7.4.3 within 30 days of such an occurrence.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected flow coating without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of coatings, thinners, or cleaning solvents at this source with various VOM contents provided that the materials are tested in accordance with Condition 7.4.7, the source wide emission limitations in Condition 5.5.1 are not exceeded and the affected coating line remains in compliance with Condition 7.4.3(b).

#### 7.4.12 Compliance Procedures

- a. Compliance with the particulate matter limitations in condition 7.4.3(c) is assured and achieved by the proper operation and maintenance of the natural gas fired dryer.
- b. Compliance of each coating with the VOM emission limitations in Condition 7.4.3(b) shall be based on the recordkeeping requirements in Condition 7.4.9 and by the use of either testing as required in Condition 7.4.7 or by use of the formulae listed below:

$$\text{VOM Coating Content} = V \times D / [ 1 - W \times D ]$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$$W = \Sigma (w_i / d_i)$$

Where:

$w_i$  = Percent exempt compound i in the coating,

$d_i$  = Overall density of exempt compound i, in lb/gal  
and the summation  $\Sigma$  is applied over water and all exempt compounds i, in the coating.

- c. Compliance with the VOM emission limits in Condition 5.5 and 7.4.6 from the affected flow coating shall be based on the record keeping requirements in condition 7.4.9 and the formulas listed below:

$$\text{VOM (tons)} = \text{Coating Usage (gal)} \times \text{Coating Density (lb/gal)} \times \text{VOM Content of Coating (\% by wt.)} / 2000$$

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- d. Compliance with the emission limits for the dryer in condition 5.5 shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10<sup>6</sup> ft<sup>3</sup>)</u>
NO <sub>x</sub>	100.0
PM	7.6
VOM	5.5

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, March, 1998.

Emissions (tons) = natural gas consumed multiplied by the appropriate emission factor/2000

7.5 Unit 05: Hand Spray Painting

7.5.1 Description

After preliminary metal fabrication, some parts are painted in a hand spray painting booth. The hand spray painted parts are air dried.

7.5.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Control Equipment
AL	Hand Spray Painting Booth	None

7.5.3 Applicability Provisions and Applicable Regulations

- a. An "affected hand spray painting" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.5.1 and 7.5.2.
- b. The affected hand spray painting at the source is subject to 35 IAC 218.204(j)(2) (A) for air-dried and extreme performance coatings, which provides that:
  - i. No owner or operator of an affected hand spray painting shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the coating as applied to Miscellaneous Metal Parts and Products. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

<u>kg/liter</u>	<u>lb/gal</u>
0.42	3.5

- ii. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.

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7.5.4 Non-Applicable Regulations of Concern

- a. The affected hand spray painting is not subject to 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material which excludes the affected hand spray painting from this requirement.

7.5.5 Operational and Production Limits and Work Practices

None

7.5.6 Emission Limitations

In addition to Condition 5.2.2, the source-wide limitations in Condition 5.5, and the VOM content limitations of Condition 7.5.3(b), the affected hand spray painting is subject to the following:

Emissions of VOM from the affected hand spray painting shall not exceed 3.0 tons/mo and 7.0 tons/yr [T1N].

This limit is based on the amount of coating used, the VOM content of the coating, the coating density, and no emissions from clean-up solvent.

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].

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 emissions limitations and other appropriate terms and conditions in this permit that limit the emissions from the affected hand spray painting below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application.[T1N].

7.5.7 Testing Requirements

Testing for VOM content of coatings and other materials shall be performed as follows [35 IAC 218.105(a), 218.211(a), and Section 39.5(7)(b) of the Act]

Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used on the affected hand spray painting booth shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a), 218.208 and 218.211(a).

- a. The VOM content of representative coatings "as applied" in the affected hand spray painting shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a).
- b. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.5.9(b) directly reflect the application of such material and separately account for any additions of solvent. [35 IAC 218.105(a), 218.208, and 218.211(a)]

7.5.8 Inspection Requirements

None

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected hand spray painting to demonstrate compliance with this section, pursuant to Section 39.5(7)(b) of the Act:

- a.
  - i. The name and identification number of each coating as applied in the affected hand spray painting;
  - ii. The usage of each coating, (gal/mo and gal/yr);

- iii. Density of each coating (lb/gal);
  - iv. VOM content of each coating (wt. %);
  - v. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month on the affected hand spray painting; and
- b. Records of the testing of VOM content (in wt. %) of each coating and cleaning solvent as tested pursuant to the conditions of this section, which include the following [Section 39.5(7)(e) of the Act]:
- i. Identification of material tested,
  - ii. Results of analysis,
  - iii. Documentation of analysis methodology, and
  - iv. Person performing analysis; and
- c. VOM emissions (tons/mo and tons/yr) as calculated by Condition 7.5.12.

#### 7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected hand spray painting 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. Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.5.3(b) (see also 35 IAC 218.204(j)) within 30 days of such an occurrence.
- b. Emissions of VOM from an affected hand spray painting in excess of the limits specified in Condition 7.5.3 within 30 days of such an occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected spray painting without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of coatings, thinners, or cleaning solvents at this source with various VOM contents provided that the materials are tested in accordance with Condition 7.5.7, the source wide emission limitations in Condition 5.5.1 are not exceeded and the affected hand spray painting remains in compliance with Condition 7.5.3(b).

7.5.12 Compliance Procedures

- a. Compliance of each coating with the VOM emission limitations in Condition 7.5.3(b) shall be based on the recordkeeping requirements in Condition 7.5.9 and by the use of either testing as required in Condition 7.5.7 or by use of the formulas listed below:

$$\text{VOM Coating Content} = V \times D / [ 1 - W \times D ]$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$W = \Sigma (w_i/d_i)$

Where:

$w_i$  = Percent exempt compound i in the coating

$d_i$  = Overall density of exempt compound i, in lb/gal and the summation  $\Sigma$  is applied over water and all exempt compounds i, in the coating.

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- b. To determine compliance with Conditions 5.5.1, VOM emissions from the affected paint booth shall be calculated based on the following:

$$\text{VOM (tons)} = \text{Coating Usage (gal)} \times \text{Coating Density (lb/gal)} \times \text{VOM Content of Coating (wt. \%)} / 2000$$

7.6 Unit 06 - Paint Burn-off Oven

7.6.1 Description

The paint encrusted hooks used to hold parts on the flow coat line are cleaned in the paint burn off oven, which drives off the VOM in the paint and ashes the pigments. The VOM that is driven off is destroyed in the afterburner, which is an integral part of this paint burn-off oven. The cleaned hooks are returned to the process line for reuse.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
AM	Paint Burn-Off Oven	Afterburner

7.6.3 Applicable Regulations

- a. An "affected paint burn-off oven" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.6.1 and 7.6.2.
- b. The affected paint burn-off oven at the source is subject to 35 IAC 212.321(a), which requires that:
  - i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, 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)].
- 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 Sections 218.302, 218.303, 218.304 of this Part and the following exception: If no odor nuisance exists

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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 paint burn-off oven not being subject to 35 IAC 217.121 for emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of the unit is less than 73.2 MW (250 mmBtu/hr) and the affected paint burn-off oven is not by definition a fuel combustion emission unit.
- b. The affected paint burn-off oven is not subject to the requirements of 35 IAC 214.301 because the affected paint burn-off oven does not emit SO<sub>2</sub>, and thus, this rule cannot be reasonably applied.
- c. The affected paint burn-off oven is not subject to the requirements of 35 IAC 216.121 for emissions of carbon monoxide because the affected paint burn-off oven is not included by the definition a 'fuel combustion emission unit'.

7.6.5 Operational and Production Limits and Work Practices

- a. Material insulated with polyvinyl chloride or asbestos, or scrap containing the fuming metals tin, zinc, or lead shall not be charged to this furnace.
- b. The afterburner shall be heated to an operating temperature of 1400<sup>0</sup>F before charging and this temperature shall be maintained during operation.
- c. The furnace shall be equipped with an afterburner temperature indicator.

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the paint burn-off oven operation is subject to the following:

None

Emission limits for PM, VOM, NO<sub>x</sub> and CO are not set for the affected paint burn-off oven, as the potential to emit

in the absence of permit limits is less than the significant and major source thresholds for these pollutants pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD).

7.6.7 Testing Requirements

None

7.6.8 Monitoring Requirements

The afterburner shall be heated to an operating temperature of 1400°F before charging and this temperature shall be maintained during operation. The furnace shall be equipped with an afterburner temperature indicator.

7.6.9 Recordkeeping Requirements

- a. The Permittee shall maintain records of the following items for paint burn-off oven to demonstrate compliance with Condition 7.6.3 and 5.5.1, pursuant to Section 39.5(7)(b) of the Act:
  - i. Record of operating temperature of the afterburner in °F.
  - ii. Record of hours of operation (hrs/yr).

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected paint burn-off oven 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. Operating temperature of the afterburner in °F.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

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7.6.12 Compliance Procedures

- a. Compliance provisions addressing condition 7.6.3(b) and (c) are not set by this permit as compliance is assumed to be achieved by the normal work practices and maintenance activities inherent in operation of the affected paint burn-off oven; and
- b. Compliance with the emission limits in Condition 5.5 from the affected paint burn-off oven shall be based on the recordkeeping requirements in Condition 7.6.9 and the formulas listed below:

VOM Emissions (ton) = Emission Rate 0.12 lb/hr x Hours of Operation x Conversion Factor ton/2000 lb.

PM Emissions (ton) = Emission Rate 0.01 lb/hr x Hours of Operation x Conversion Factor ton/2000 lb.

7.7 Unit 07: Plant incinerator

7.7.1 Description

The plant incinerator is used for on-site disposal of general non hazardous plant refuse. The incinerator is of "multiple-chamber" design, with a primary combustion chamber (into which waste is charged) followed by a secondary combustion chamber. Efficient combustion is maintained by natural gas fired supplementary burners installed in each chamber.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
AN	Brule FG4-T8H Charging Capacity: 120 lb/hr	Secondary Combustion Chamber with Burner

7.7.3 Applicable Regulations

- a. An "affected incinerator" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.7.1 and 7.7.2.
- b. Emissions of PM from any incinerator, for which construction or modification commenced on or after April 14, 1972, shall not exceed 229 mg/standard cubic meter (0.1 grain/scf) of effluent gases, corrected to 12 percent carbon dioxide [35 IAC 212.181(d)]; and
- c. Emissions of CO from any incinerator shall not exceed 500 ppm, corrected to 50 percent excess air [35 IAC 216.141].
- d. 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 Sections 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].

7.7.4 Non-Applicability of Regulations of Concern

- a. The affected plant incinerator not being subject to 35 IAC 217.121 for 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 plant incinerator is not by definition a fuel combustion emission unit.
- b. The affected plant incinerator is not subject to the requirements of 35 IAC 214.301 because process emissions of  $\text{SO}_2$  from this unit are so small that these rules cannot be reasonably applied.

7.7.5 Operating Requirements and Work Practices

- a. Only general non-hazardous plant wastes shall be charged to the incinerators at the rate not exceeding 120 lb/hr.
- b.
  - i. The secondary combustion chamber of the incinerator shall be preheated to the  $1400^\circ\text{F}$  prior to introducing waste into the incinerator.
  - ii. This temperature shall be maintained until burnout of waste in the primary chamber is completed.
- c. The condition of the incinerator shall be inspected on a periodic basis for the presence of deficiencies and any deficiency shall be expeditiously repaired or an incinerator taken out of service.

7.7.6 Emission Limitations

In addition to Condition 5.2.2, the source-wide limitations in Condition 5.5, and emission limitations of Condition 7.7.3, the affected plant incinerator is subject to the following:

- a. Emissions from the plant incinerator shall not exceed the following limits:

VOM (T/yr)	PM (T/yr)	$\text{NO}_x$ (T/yr)
1.31	0.35	0.57

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These limits are based upon waste feed rate 120 lbs/hr, 8,760 hours of operation and emission rates listed in condition 7.7.12(b).

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

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 emissions limitations and other appropriate terms and conditions in this permit that limit the emissions from the affected plant incinerator below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

7.7.7 Testing Requirements

N/A

7.7.8 Monitoring Requirements

The incinerator shall be equipped with a secondary combustion chamber temperature indicator to allow verification of compliance with requirements of Condition 7.7.5(b).

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain the following records for the incinerator to demonstrate compliance with Conditions 5.5.1 and 7.7.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Secondary combustion chamber temperature prior and during the time of operation;
- b. Type and amount of waste charged (lb/hr and tons/yr);

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- c. Annual aggregate CO and PM emissions from the incinerator, based on the amount of waste charged and the applicable emission factors, with supporting calculations;
- d. Operating logs for the incinerator, which include time of operation, operating temperature of secondary chamber;
- e. Inspection maintenance logs for the incinerator, with dates of inspection, maintenance, repair, or other actions completed; and
- f. Emissions of PM, NO<sub>x</sub>, VOM and CO (tons/year) as calculated by Condition 7.7.12.

#### 7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected incinerator 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. Within 30 days for each occurrence when the incinerator was not operated in compliance with requirements of Condition 7.7.5, with date, description and explanation;
- b. Within 90 days for each occurrence when the monitoring system required by Condition 7.7.8 was not in service prior to initially charging waste to an incinerator; and
- c. Emissions of PM and CO from the affected incinerator in excess of the limits specified in Condition 7.7.3(b) and 7.7.3(c), respectively, within 30 days of such an occurrence.

#### 7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

- a. Compliance with Condition 7.7.3(b) and (c) by an incinerator is assumed to be achieved by compliance with operating requirements and work-practices specified by Condition 7.7.5.
- b. Compliance with the emission limits in Condition 5.5 shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission rates and formulas listed below:

Emission Rates	
<u>Pollutant</u>	<u>(lb/hr)</u>
PM	0.08
NO <sub>x</sub>	0.13
CO	0.03
VOM	0.30

Hourly emission rates from application of PM, CO and VOM based on stack test of March 3, 1987, while NO<sub>x</sub> emissions are based on AP-42 emission factor of 100 lbs NO<sub>x</sub>/mmcf natural gas.

Incinerator Emissions (ton) = Emission Rates (lbs/hr)  
x Hours of Operation (hrs)/(2,000 lb/ton).

7.8 Unit 08 Gas fired boilers

7.8.1 Description

The boilers are used to produce hot water for heating and process use.

7.8.2 List of emission equipment and pollution control equipment

Plant Emission Unit	Boiler Identification	Maximum Heat Input mmBtu/hr
AP	Office Boiler	1.75
AQ	1 MP Line Boiler	0.825
AR	4 & 5 MP Lines Boiler	0.825
AS	Mapleton Boiler	0.670
AK	Iron Phos Treat Boiler	3.2
	No-Chrome Rinse Boiler	3.2

7.8.3 Applicable Regulations

- a. The "affected boiler" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.8.1 and 7.8.2.

7.8.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small - Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units with design heat input capacity of 10 to 100 mmBtu/hr. These boilers are <10 mmBtu/hr, therefore, these rules do not apply.
- b. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, "Use of Organic Material".
- c. The affected boiler is not subject to the requirements of 35 IAC 216.121 or 35 IAC 217.141 because the actual heat input of each of the affected boilers is less than 10 mmBtu/hr.

7.8.5 Operational and Production Limits and Work Practices

Natural gas shall be the only fuel burned in the affected boiler

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7.8.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the Iron Phosphate Treatment Boiler and the No-chrome Rinse Boiler (AK) are subject to the following:

- a. Emissions from each boiler shall not exceed the following limits:

<u>Pollutant</u>	<u>Emission (T/yr)</u>
NO <sub>x</sub>	1.4
PM	0.17
VOM	0.1

These limits are based on maximum firing rate of each of the Iron Phosphate Treatment Boiler and the No-chrome Rinse Boiler (AK) (3.2 mmBtu/hr/boiler), standard Ap-42 emission factors and 8760 hours of operation/yr.

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].

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 emissions limitations and other appropriate terms and conditions in this permit that limit the emissions from the affected boiler below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

7.8.7 Testing Requirements

None

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items which allow demonstration of compliance with Condition 5.5.1 and 7.8.5 pursuant to Section 39.5 (7) (b) of the Act:

- a. Total natural gas usage for the boilers (mmcf/yr)
- b. Annual aggregate NO<sub>x</sub>, PM and VOM emissions from the boilers, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.8.10 Reporting Requirements

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

None

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

- a. Compliance with Condition 7.8.3 (b) is assumed to be achieved by work-practices inherent in 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 shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and formulas listed below:

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<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10<sup>6</sup> ft<sup>3</sup>)</u>
NO <sub>x</sub>	100.0
PM	7.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in boilers (<100 mmBtu/hr), Tables 1.4.1 and 1.4.2, AP-42, Volume I, Supplement D, March, 1998.

Boiler Emissions (ton) = Natural Gas Consumed  
Multiplied by the Appropriate Emission Factor/2000.

7.9 Unit 9: 0.44 mmBtu/hr Waste Oil Fired Water Heater

7.9.1 Description

A small water heater is fired with waste oil generated on site.

7.9.2 List of Emission Units and Pollution Control Equipment

Plant Emission Unit	Description	Maximum Heat Input
AO	Small Water Heater Fired with Waste Oil	0.44 mmBtu/hr

7.9.3 Applicable Regulations

- a. An "affected water heater" for the purpose of these unit specific conditions is an emission unit described in conditions 7.9.1 and 7.9.2.
- b.
  - i. The emissions of particulate matter (PM) into the atmosphere in any one hour period shall not exceed 0.15 kg/MW-hr (0.10 lb/mmBtu) of actual heat input from any fuel combustion emission unit using liquid fuel exclusively [35 IAC 212.206].
  - ii. The emission of sulfur dioxide (SO<sub>2</sub>) into the atmosphere in any one hour period from any new fuel combustion emission unit, burning liquid fuel exclusively shall not exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lb/mmBtu) [35 IAC 214.122(b)(2)].
- c. The affected water heater is subject to the opacity limits identified in Condition 5.2.2(b).

7.9.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small - Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units with design heat input capacity of 10 to 100

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mmBtu/hr. The water heater is <10 mmBtu/hr, therefore, these rules do not apply.

- b. Pursuant to 35 IAC 218.303, the affected water heater is not subject to 35 IAC 218.301, "Use of Organic Material".
- c. The affected water heater is not subject to the requirements of 35 IAC 216.121 or 35 IAC 217.141 because the actual heat input of the affected water heater is less than 10 mmBtu/hr.

#### 7.9.5 Operational and Production Limits and Work Practices

- a. Waste oil generated off-site shall not be burned in the affected water heater. Contaminants in the waste oil shall not exceed Lead 2.7 parts per million, Chlorine 3.7 percent and Ash content 3.3 to 18.4 percent.
- b. The Permittee shall not burn waste oil in the affected water heater with a sulfur content greater than the larger of the following two values:
  - i. 0.28 weight percent, or
  - ii. The wt. percent given by the formula:  
$$\text{Maximum wt. percent sulfur} = (0.000015) \times (\text{Gross heating value of oil, Btu/lb}).$$

#### 7.9.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected water heater is subject to the following:

None

Emission limits for PM, VOM, NO<sub>x</sub> and CO are not set for the affected water heater, as potential to emit in the absence of permit limit is less than the significant and major source thresholds for these pollutants pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD).

7.9.7 Testing Requirements

None

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items to demonstrate compliance with Conditions 5.5.1 and 7.9.5 pursuant to Section 39.5(7)(b) of the Act:

- a. Waste oil usage for the affected water heater (gal/yr);
- b. The maximum monthly lead, chlorine, ash and sulfur content of waste oil used in the affected water heater;
- c. Annual emissions of NO<sub>x</sub>, PM, VOM, Lead and Hydro Chloric Acid (HCL) from the affected water heater, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected water heater 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. Notification within 60 days of operation of an affected water heater that may not have been in compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident;
- b. If there is an exceedance of contaminant content of waste oil in excess of the limit specified in Condition 7.9.5, the Permittee shall submit a report

within 30 days after receipt of a noncompliant analysis of waste oil; and

- c. Emissions of NO<sub>x</sub>, PM, or VOM from the affected water heater in excess of the limits specified in Condition 5.5.1 based on a calendar yearbasis.

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.9.12 Compliance Procedures

- a. Compliance with Conditions 7.9.3(b)(i) and 7.9.3(b)(ii) is demonstrated under inherent operating conditions of affected water heater fired by waste oil with a sulfur content meeting the specification of Condition 7.9.5(b), so that no compliance procedures are set in this permit addressing these regulations.
- b. Compliance with the emission limits in Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.9.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Factor (lb/1,000 gals)</u>
PM	64A
PM <sub>10</sub>	51A
NO <sub>x</sub>	19.0
SO <sub>2</sub>	147S
VOM	1.0
Lead	55L
HCL	66Cl

Where: A=weight % ash; L=weight % lead;  
 S=weight % sulfur; CL=weight % chlorine

These are the emission factors for uncontrolled waste oil combustor, Tables 1.11-1, 1.11-2, and 1.11-3, AP-42, Volume I, Supplement F, October, 1996.

Boiler Emissions (ton) = Waste Oil Consumed Multiplied by the Appropriate Emission Factor/2000.

7.10 Unit 10 - Storage Tank

7.10.1 Description

The source operates a storage tank for storing gasoline.

7.10.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Emission Control
AT	2,500 Gallon Gasoline Storage Tank	Submerged Loading

7.10.3 Applicability Provisions

- a. The "affected storage tank", for the purpose of these unit-specific conditions is an emission unit described in conditions 7.10.1 and 7.10.2.
- b. No person shall cause or allow the loading of any organic material in any stationary tank having a storage capacity of greater than 946 liter (250 gallon), unless such tank is equipped with a permanent submerged loading pipe [35 IAC 218.122(b)]. Except as provided in the following exemptions: If the tank is a pressure tank then the limitations of 35 IAC 218.122(b) shall not apply [35 IAC 218.122(c)] or if no odor nuisance exists then the limitation of 35 IAC 218.122(b) shall only apply when the tank is used to store a volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70<sup>0</sup> F [35 IAC 218.122(d)].
- c. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary tank at gasoline dispensing operation, unless such tank is equipped with a submerged loading pipe [35 IAC 218.583(a)(1)].

7.10.4 Non-Applicability of Regulations of Concern

- a. The affected storage tank is not subject to the requirements of 35 IAC 218.121, because the tank is less than 40,000 gal.

- b. The affected storage tank is not subject to the requirements of 35 IAC 218.122(a), because the tank is less than 40,000 gal.

7.10.5 Operational and Production Limits and Work Practices

Each affected storage tank is subject to the applicable provisions of Condition 7.10.3. The affected storage tank shall be equipped and operated with a submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA, pursuant to 35 IAC 218.122(b) and/or 218.583(a). (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe or submerged loading fill.)

7.10.6 Emission Limitations

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

Emissions of VOM from the affected storage tank shall not exceed 0.75 ton/yr [T1N].

Compliance with the annual limit shall be determined on a calendar year basis.

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 emissions limitations and other appropriate terms and conditions in this permit that limit the emissions from the affected storage tank below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

7.10.7 Testing Requirements

None

7.10.8 Inspection and Monitoring Requirements

None

#### 7.10.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected tank to demonstrate compliance with Condition 7.10.5 and 7.10.6 pursuant to Section 39.5(7) of the Act:

- a. Design information for the tank showing the presence of a submerged loading pipe or submerged fill;
- b. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- c. The throughput of the affected storage tanks, gal/yr; and
- d. The annual VOM emissions from the affected storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

#### 7.10.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected storage 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 loading of gasoline or other VOL into an affected tanks that was not in compliance with Condition 7.10.5, e.g., no "submerged loading pipe or submerged fill" within five days of becoming aware of the noncompliance status. This notification shall include a description of the event, the cause for the noncompliance, actions taken to correct the noncompliance and the steps taken to avoid future noncompliance.
- b. Any storage of gasoline or other VOL in an affected tanks that is out of compliance with the control requirements (Condition 7.10.5) due to damage,

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deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the noncompliance status. This notification shall include a description of the event, the cause for the noncompliance, actions taken to correct the noncompliance, and the steps to be taken to avoid future noncompliance.

#### 7.10.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tanks without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. Changes to components related to either the "submerged loading pipe or submerged fill", including addition of new components and repair and replacement of components; and
- b. Changes in the material stored in a tank provided the tank continues to comply with the Conditions of Section 7.10.5 of this permit.

#### 7.10.12 Compliance Procedures

Compliance with the emission limits in condition 5.5 and 7.10.6 shall be based on the recordkeeping requirements in Condition 7.10.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected storage tank, the current version 3.1 of the TANKS program is acceptable, or any subsequent program submitted by the Permittee and accepted by Illinois EPA.

## 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 \_\_\_\_\_{insert public notice start date} (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;

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- 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:

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- i. Illinois EPA - Air Compliance Section  
  
Illinois Environmental Protection Agency (MC 40)  
Bureau of Air  
Compliance Section  
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].

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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 ton/hr):

	Metric	English
P	Mg/hr	Ton/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 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/hr
A	11.42	24.8
B	0.16	0.16

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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	ton/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	7.2	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

Where:

P = Process weight rate in Mg/hr or T/hr; and  
 E = Allowable emission rate in Kg/hr or lbs/hr

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 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 units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section 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. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	ton/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67

- ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

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

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c. Limits for Process Emission Units For Which  
 Construction or Modification Commenced Prior to  
 April 14, 1972

P Mg/hr	Metric	English	E lbs/hr
	E kg/hr	P T/hr	
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	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.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Where:

P = Process weight rate in Mg/hr or T/hr; and  
 E = Allowable emission rate in Kg/hr or lbs/hr

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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: \_\_\_\_\_

MJP:jar