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1.0 SOURCE IDENTIFICATION

1.1 Source

Caterpillar, Inc.
2200 Channahon Road
Joliet, Illinois 60436
815/729-6730

I.D. No.: 197809AAC
Standard Industrial Classification: 3531, Construction Machinery
and Equipment

1.2 Owner/Parent Company

Caterpillar, Inc.
Post Office Box 504
Joliet, Illinois 60434-0504

1.3 Operator

Caterpillar, Inc.
Post Office Box 504
Joliet, Illinois 60434-0504

Kevin M. Bennett, Environmental Engineer
815/729-6453

1.4 General Source Description

Caterpillar, Inc. is located at 2200 Channahon Road in Joliet. The source primarily manufactures hydraulic components, including tanks, pumps, valves and cylinders. Each of these families of components have test stands within the manufacturing processes which are used to cycle and/or test finished products for their conformance to Caterpillar's specifications. The plant also manufactures miscellaneous components, including ground engaging tools, bearings and caps. In addition, large mining vehicles, including excavators, wheel loaders and motorgraders are assembled on site. The manufacturing processes associated with the components and vehicles are machining, grinding, heat treating, welding, chrome plating, and painting.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

AAGF	Atomic Absorption Graphite Furnace
ACMA	Alternative Compliance Market Account
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
amp-hr	ampere hours
AP-42	Compilation of Air Pollution 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 27717
ASTM	American Society for Testing and Materials
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CARB	California Air Resources Board
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CrO ₃	Chromic Acid or Chromium Anhydride
dscf	dry standard cubic foot
dscm	dry standard cubic meter
ERMS	Emission Reduction Market System
°F	degrees Fahrenheit
gal	gallon
gr	grains
hr	hour
HAP	Hazardous Air Pollutants
HVLP	High Volume Low Pressure
IAC	Illinois Administrative Code
ICPCR	Ion Chromatography with a Post-column Reactor
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kPa	kilopascal
kW	kilowatt
l	liter
LAER	Lowest Achievable Emission Rate
lb	pound
m ³	cubic meter
MACT	Maximum Achievable Control Technology
Mft ³	Million cubic feet
Mg	Metric Tonnes or Megagrams
mg	milligram
min	minute
mmBtu	Million Btus
mo	month

MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
OSHA	Occupational Safety and Health Administration
oz	ounce
PBS	Packed-Bed Scrubber
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psi	pound per square inch
scf	standard cubic feet
SO ₂	Sulfur Dioxide
SOP	Standard Operating Procedure
T	Ton
T1	Title I - identifies Title I conditions that have been carried over from an existing construction permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing construction permit and subsequently revised in this permit
TANKS	USEPA Emission Estimating Program for Storage Tanks
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
VPL	Volatile Petroleum Liquid
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:

Antifreeze (Ethylene Glycol) Storage Tank
Welding and Cutting Equipment
Tool Room Lead Smelting Furnace

- 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:

30,000 Gallon Propylene Storage Tank

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

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

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

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

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

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

3.2 Addition of Insignificant Activities

3.2.1 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).

3.2.2 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.

3.2.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 01	MJ6503: Haden-Schweitzer 82' Hydrosprin Paint Spray Booth (Small Building B Paint Booth)	April, 1976	Scrubber System
Unit 02	MJ7450: OMI Chrome Plating Tank MJ7450 (HX278 Chrome Plate System)	July, 1980	Fume Scrubber #1
	MJ7451: OMI Chrome Plating Tank MJ7451 (HX278 Chrome Plate System)	July, 1980	Fume Scrubber #2
	MJ8968: OMI Chrome Plating Tank MJ8968 (HX470 Chrome Plate System)	February, 1990	Fume Scrubber F103-18
	MJ8970 OMI Chrome Plating Tank MJ8970 (HX470 Chrome Plate System)	February, 1990	Fume Scrubber F103-14
Unit 03	Electric Furnace Co. Model #4725-4-E Heat Treating Furnace with North American Gas Burner Tubes (MJ8859 Hardening Furnace, 3.165 mmBtu/hr)	April, 1989	None
	Electric Furnace Co. Model #4425-4-5 Heat Treating Furnace with North American Gas Burner Tubes (MJ8861 Temper Furnace, 1.175 mmBtu/hr)	April, 1989	None
	Electric Furnace Co. Model #4725-4-E Heat Treating Furnace with North American Gas Burner Tubes (MJ8886 Hardening Furnace, 3.784 mmBtu/hr)	April, 1989	None
	Electric Furnace Co. Model #4425-4-5 Heat Treating Furnace with North American Gas Burner Tubes (MJ8888 Temper Furnace, 2.505 mmBtu/hr)	April, 1989	None
	Electric Furnace Co. Model #4725-4-E Heat Treating Furnace with North American Gas Burner Tubes (MJ8889 Hardening Furnace, 3.784 mmBtu/hr)	April, 1989	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 03 (Cont.)	Electric Furnace Co. Model #4425-4-5 Heat Treating Furnace with North American Gas Burner Tubes (MJ8891 Temper Furnace, 2.505 mmBtu/hr)	April, 1989	None
Unit 04	B1: Springfield Boiler (Cleaver Brooks) Model Max W.P. 200 Natural Gas-Fired Boiler (Boiler #1, 110 mmBtu/hr)	November, 1972	None
	Springfield Boiler (Cleaver Brooks) Model Max W.P. 200 Natural Gas-Fired Boiler (Boiler #4, 137 mmBtu/hr)	November, 1972	None
Unit 05	AH1: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #1, 4.5 mmBtu/hr)	May, 1993	None
	AH2: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #2, 4.5 mmBtu/hr)	May, 1993	None
	AH3: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #3, 4.5 mmBtu/hr)	May, 1993	None
	AH4: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #4, 4.5 mmBtu/hr)	May, 1993	None
Unit 06	Gasoline Storage Tank TT0420 (10,000 gallons)	October, 1986	None
Unit 07	B2: Springfield Boiler (Coen Burners) Model Max W.P. 200 Natural Gas/No. 2 Distillate Fuel Oil-Fired Boiler (Boiler #2, 112.6 mmBtu/hr (gas), 112.0 mmBtu/hr (oil))	November, 1972	Low NO _x Burner

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 07 (Cont.)	B3: Springfield Boiler (Coen Burners) Model Max W.P. 200 Natural Gas/No. 2 Distillate Fuel Oil-Fired Boiler (Boiler #3, 175 mmBtu/hr (gas), 119.888 mmBtu/hr (oil))	November, 1972	Low NO _x Burner
Fugitive VOM Emissions	Cab Assembly Area and Chrome Plating System Solvent Usage	-	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO_x, VOM, and HAP 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. The emission of smoke or other particulate matter from any emission unit shall not exceed an opacity of greater than 30 percent, except that an opacity of greater than 30 percent but less than 60 percent shall be allowed for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 feet) radius from the center point of any other such emission unit owned or operated by the Permittee, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period, pursuant to 35 IAC 212.123 and 212.124.

5.2.3 Operating Program for Particulate Matter

a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

5.2.4 Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in Part 68, then the owner or operator shall submit a Risk Management Plan (RMP) by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.

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

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

5.3 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
Nitrogen Oxides (NO _x)	420.64
Particulate Matter (PM)	12.87
Sulfur Dioxide (SO ₂)	1.46
Volatile Organic Material (VOM)	103.38
HAP, not included in VOM or PM	--
TOTAL	538.35

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 Records for Storage Vessels

Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 IAC Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel [35 IAC 218.129(f)].

5.6.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements as follows, pursuant to Section 39.5(7)(f)(iii) 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

N/A

6.0 EMISSION 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 Transaction

- 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 Emission Excursion Compensation

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

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

6.6 Quantification of Seasonal VOM Emissions

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

No exceptions

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

6.7 Annual Account Reporting

- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:
 - i. Actual seasonal emissions of VOM from the source;
 - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
 - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;
 - iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
 - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and

vi. If a source is operating a new or modified emission unit for which three years of operational data is not yet available, as specified in 35 IAC 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.

b. This report shall be submitted by November 30 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 325 ATUs per seasonal allotment period.

ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 36.8295 tons per season.

iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.11 of this permit.

iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.

v. Condition 6.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.

b. Contingent Allotments for New or Modified Emission Units

Not applicable.

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

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

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

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

6.9 Recordkeeping for ERMS

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

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.6(a); and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.10 Federal Enforceability

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

6.11 Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:
 - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;
 - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
 - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

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

Boiler #1
Boiler #2
Boiler #3
Boiler #4

- 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: MJ6503 Building B Paint Booth
Control: MJ6503 Building B Paint Booth Scrubber System

7.1.1 Description

The Building B Paint Booth is used on large vehicle assemblies and components for mining excavators, wheel loaders, and motorgraders. The part to be painted is conveyed through a series of pretreatment steps, then sent to a paint booth. In this booth, the parts are painted using a two-component urethane primer and topcoat. The parts are painted using hand held high volume low pressure (HVLP) paint spray guns. In the Building B Paint Booth the paint is air dried and cured. The paint booth has attached filter systems to remove the paint particulates from the exhaust air, prior to outside ventilation. All VOM used in the process is emitted. Solvents used for cleanup is reclaimed with approximately 50% efficiency and reused after distillation to remove contaminants.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 01	MJ6503: Haden-Schweitzer 82' Hydrospin Paint Spray Booth (Small Building B Paint Booth)	Scrubber System

7.1.3 Applicability Provisions and Applicable Regulations

- a. The Building B Paint Booth is "affected coating lines" for the purpose of these unit-specific conditions.
- b. Each affected coating line is subject to the emission limits identified in Condition 5.2.2.
- c. The affected coating lines are subject to 35 IAC 212.321(a), which provides 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)].

- ii. Because the expected process weight rate for each affected coating line is less than 100 pounds per hour, the allowable PM emission rate for each affected coating line set by 35 IAC 212.321 is 0.55 pounds per hour.
- d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].
- e. Pursuant to 35 IAC 218.204, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are 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, except where noted. 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 composition. The emission limitations are as follows:
 - i. Heavy Off-Highway Vehicle Products
Coating/Extreme Performance Prime Coat [35 IAC 218.204(k)(1)]:

kg/l	lb/gal
0.42	3.5
 - ii. Heavy Off-Highway Vehicle Products
Coating/Extreme Performance Top-Coat (Air Dried) [35 IAC 218.204(k)(2)]:

kg/l	lb/gal
0.42	3.5
 - iii. Heavy Off-Highway Vehicle Products
Coating/Final Repair Coat (Air Dried) [35 IAC 218.204(k)(3)]:

kg/l	lb/gal
0.42	3.5

7.1.4 Non-Applicability of Regulations of Concern

- a. The air make-up heaters and curing oven associated with the affected coating lines are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the air make-up heaters and curing oven are not by definition fuel combustion emission units.

- b. The air make-up heaters and curing oven associated with the affected coating lines are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat of each unit input is less than 73.2 MW (250 mmBtu/hr) and the air make-up heaters and curing oven are not by definition fuel combustion emission units.
- c. The affected coating lines are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM₁₀, as identified in 35 IAC 212.324(a)(1).
- d. No owner or operator of a coating line subject to the limitations of 35 IAC 218.204 is required to meet the limitations of 35 IAC 218.301 or 218.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

7.1.5 Operational and Production Limits and Work Practices

- a. The Permittee shall follow good operating practices for the paint booth scrubber system, including periodic inspection, routine maintenance and prompt repair of defects.
- b. Natural gas shall be the only fuel fired in the paint booth MJ6503 air make-up heater, and MJ6503 washers air make-up heater, and paint booth MJ6503 paint curing oven.

7.1.6 Emission Limitations

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

- a. Emissions from Coating:
 - i. Emissions and operation of Building B dozer paint booth MJ6503 shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Coating Usage (gal/yr)</u>	<u>VOM Content (lb/gal)</u>	<u>VOM Emissions lb/hr</u>	<u>VOM Emissions ton/yr</u>
Paint Booth MJ6503	42,000	3.5	17.5	73.5

These limits are based on the allowable emission limit pursuant to 35 IAC 218.204(k)

at the maximum coating usage, allowable VOM content, and maximum hours of operation.

- ii. Emissions of particulate matter from the Building B dozer paint booth shall not exceed 0.55 lb/hr and 2.4 ton/yr. These limits are based on the allowable emission limit pursuant to 35 IAC 212.321 at the maximum process rate (60 lb/hr) and the maximum hours of operation (8,400 hr/yr).
- iv. Emissions and operation of Building B paint booth MJ6503 solvent clean-up operations shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Solvent Usage (gal/yr)</u>	<u>VOM Content (lb/gal)</u>		<u>VOM Emissions (lb/hr ton/yr)</u>	
Paint Booth MJ6503	13,440	7.2	11.6	48.8	

These limits are based on the maximum solvent usage, the maximum VOM content, and maximum hours of operation.

- v. The above limitations were established in Construction Permit 96030245, pursuant to 35 IAC Part 203 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 and the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

b. Emissions from Natural Gas Combustion:

- i. Emissions and operation of the natural gas fired paint booth MJ6503 air make-up heater shall not exceed the following limits:

<u>Natural Gas Consumption (ft³/yr)</u>	<u>NO_x Emissions (lb/hr T/yr)</u>		<u>CO Emissions (lb/hr T/yr)</u>		<u>PM Emissions (lb/hr T/yr)</u>		<u>VOM Emissions (lb/hr T/yr)</u>	
128,688,000	3.8	9.2	1.0	2.4	0.4	1.0	0.2	0.5

These limits are based on standard emission factors (140 lb/Mft³ for NO_x, 35 lb/Mft³ for CO, 13.7 lb/Mft³ for PM, and 5.8 lb/Mft³ for VOM), and the fuel, the maximum firing rate

(26.81 mmBtu/hr), and the maximum hours of operation (4,800 hr/yr).

- iii. Emissions and operation of the natural gas fired paint booth MJ6503 washers air make-up heater shall not exceed the following limits:

Natural Gas Consumption (ft ³ /yr)	NO _x Emissions		CO Emissions		PM Emissions	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
42,912,000	0.9	2.2	0.2	0.5	0.2	0.5

These limits are based on standard emission factors (100 lb/Mft³ for NO_x, 21 lb/Mft³ for CO, and 12 lb/Mft³ for PM), and the fuel, the maximum firing rate (8.94 mmBtu/hr), and the maximum hours of operation (4,800 hr/yr).

- iv. Emissions and operation of the natural gas fired paint booth MJ6503 paint curing oven shall not exceed the following limits:

Natural Gas Consumption (ft ³ /yr)	E M I S S I O N S NO _x		C O CO	
	lb/hr	Ton/yr	lb/hr	Ton/yr
30,000,000	0.7	1.7	0.2	0.5

These limits are based on standard emission factors (100 lb/Mft³ for NO_x and 21 lb/Mft³ for CO), and the fuel, the maximum firing rate (6.25 mmBtu/hr), and the maximum hours of operation (4,800 hr/yr).

- v. The above limitations were established in Construction Permit 96010110, pursuant to 35 IAC Part 203 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 and the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

- c. 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).

7.1.7 Testing Requirements

- a. The VOM content of each coating shall be determined by the applicable test methods and procedures specified in 35 IAC 218.105 to establish the records required under Condition 7.3.9(b) (see also 35 IAC 218.211) [35 IAC 218.211(a)].
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the VOM content of specific coatings and cleaning solvents used on the affected coating line shall be determined as follows:
 - i. The VOM content of representative coatings "as applied" on the affected coating line 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).
 - ii. 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 7.1.9(b) directly reflect the application of such material and separately account for any additions of solvent.

7.1.8 Monitoring 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 the affected coating lines to demonstrate compliance with Conditions 5.5.1 and 7.1.3, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of VOM content of coatings and cleaning solvents pursuant to Condition 7.1.7, 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.

- b. Pursuant to 35 IAC 218.211(c)(2), the Permittee shall collect and record all of the following information each day for the affected coating line and maintain the information at the source for a period of three years:
 - i. The name and identification number of each coating as applied on the affected coating lines; and
 - ii. 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 day on the affected coating lines.
- c. Records addressing use of good operating practices for the paint booth scrubber system:
 - i. Records for periodic inspection of the paint booth scrubber system with date, individual performing the inspection, and nature of inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- d. Records of the coating usage for the affected coating lines, gal/mo and gal/yr;
- e. The VOM content of coatings, % by Wt;
- f. Density of coatings, lb/gal;
- g. Records of the solvent usage for the affected coating lines, gal/mo and gal/yr;
- h. Density of solvent, lb/gal;
- i. The operating schedule of the affected coating lines;
- j. The natural gas usage of the air make-up heaters and curing oven associated with the affected coating lines, Mft³/mo and Mft³/yr;
- k. The aggregate monthly and annual PM and VOM emissions from the affected coating lines based on the material usage, with supporting calculations; and
- l. The monthly and aggregate annual CO, NO_x, PM, SO₂, and VOM emissions from the air make-up heaters and curing oven associated with the affected coating

lines based on the fuel usage and standard emission factors, with supporting calculations.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected coating line 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 7.1.3(e) (see also 35 IAC 218.204) within 30 days following the occurrence of the violation.
- b. Continued operation of the affected coating lines with a defect in the paint booth scrubber system that may result in emissions of particulate matter in excess of limits in Conditions 7.1.6(a)(ii) or (iii) within 30 days of such an occurrence.
- c. Emissions of VOM in excess of limits in Conditions 7.1.6(a)(i) through (iv) within 30 days of such an occurrence.
- d. Emissions of CO, NO_x, PM and/or VOM in excess of the limits in Condition 7.1.6(b) within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

- a. Compliance with Condition 7.1.3(c) is assumed to be achieved by proper operation of the paint booth scrubber system, as addressed by Condition 7.1.5.
- b. Compliance with Condition 7.1.3(d) is assumed by the work-practices inherent in operation of natural gas-fired air make-up heaters and a curing oven.
- c. To determine compliance with Condition 5.5.1, PM and VOM emissions from the affected coating lines shall be calculated based on the following:

i. Particulate Matter Emissions:

$$\text{PM (lb)} = (\text{Coating Usage, gal}) \times (\text{Coating Density, lb/gal}) \times (\text{Wt \% Solids}) \times [1 - (\text{Transfer Efficiency}^* (\%)/100)] \times [1 - (\text{Paint Booth Scrubber System Efficiency}^* (\%)/100)]$$

*As specified by manufacturer or vendor of the spray booths and paint booth scrubber system

ii. Volatile Organic Material Emissions:

$$\text{VOM (lb)} = (\text{Coating Usage, gal}) \times (\text{Coating Density, lb/gal}) \times (\text{VOM Content of Coating, \% by Wt.}) + (\text{Cleaning Solvent Usage, gal}) \times (\text{Solvent Density, lb/gal})$$

d. To determine compliance with Conditions 5.5.1 and 7.1.6(b), fuel combustion emissions from the air make-up heaters and curing oven associated with the affected coating line shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/Mft³)</u>
CO	84
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, March, 1998.

$$\text{Air Make-up Heater and Curing Oven Emissions (lb)} = (\text{Natural Gas Consumed, Mft}^3) \times (\text{The Appropriate Emission Factor, lb/Mft}^3)$$

7.2 Unit 02: Chrome Plating Systems (HX278-280 & HX470)
Control: Chrome Plating Scrubber System (HX278-280 & HX470)

7.2.1 Description

The chrome plating process is used exclusively on hydraulic cylinder rods that actuate the motions (i.e., swinging, lifting, and hoisting) of the implements on earthmoving equipment that Caterpillar manufactures. The chrome plating process involves conveying turned, heat treated, and ground rods via a programmable hoist through a series of pretreatment tanks for replate preparation, then to an electrified tanks containing a solution of chromic acid (32 oz/gal CrO₃ in water) for the actual plating process. The process deposits 0.001" - 0.0035" (depending on rod application) of chrome on the rod. The chrome plating process generates hydrogen gas that has entrained droplets of chromic acid in it, which creates a mist. The ventilation system carries the mist through a scrubber system to strip the chromic acid and redissolve it in water which is then returned to a rinse tank. The rinse tank is used to makeup the solution level losses due to evaporation in the plating tank. The excess chromic acid containing rinse water is pumped to waste water treatment for reduction, precipitation and disposal.

7.2.2 List of Emission Units and Pollution Control Equipment

Unit	Description	Emission Control Equipment
Unit 02	OMI Chrome Plating Tank MJ7450 (HX278 Chrome Plate System)	Fume Scrubber #1
	OMI Chrome Plating Tank MJ7451 (HX278 Chrome Plate System)	Fume Scrubber #2
	OMI Chrome Plating Tank MJ8968 (HX470 Chrome Plate System)	Fume Scrubber F103-18
	OMI Chrome Plating Tank MJ8970 (HX470 Chrome Plate System)	Fume Scrubber F103-14

7.2.3 Applicability Provisions and Applicable Regulations

- a. Chrome Plating Tanks MJ7450, MJ7451, MJ8968, and MJ8970 are "affected plating tanks" for the purpose of these unit-specific conditions.
- b. Each affected plating tank is subject to the emission limits identified in Condition 5.2.2.
- c. The affected plating tanks are subject to the NESHAP for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, 40 CFR 63 Subparts A and N. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Because the

affected plating tanks are used to apply a thick layer of chromium (typically 1.3 to 760 microns) which is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance, they are considered to be hard chromium electroplating tanks and are subject to the following:

- i. During tank operation, each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm of total chromium of ventilation air (6.6×10^{-6} gr/dscf) [40 CFR 63.342(c) (1) (i)].
 - ii. When multiple affected sources performing the same type of operation (e.g., all are performing hard chromium electroplating), and subject to the same emission limitation, are controlled with an add-on air pollution control device that is not controlling emissions from any other type of affected operation or from any nonaffected sources, the applicable emission limitation identified in Condition 7.2.3(c) (i) (see also 40 CFR 63.342) must be met at the outlet of the add-on air pollution control device [40 CFR 63.344(e) (2)].
- d. The affected plating tanks are subject to 35 IAC 212.321(a), which provides 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)].
 - ii. Because the expected process weight rate for the affected plating tanks is 4,166.24 pounds per hour, combined, the allowable PM emission rate for the affected plating tanks set by 35 IAC 212.321 is 3.76 pounds per hour, combined.

7.2.4 Non-Applicability of Regulations of Concern

The affected plating tanks are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM₁₀, as identified in 35 IAC 212.324(a) (1).

7.2.5 Operational and Production Limits and Work Practices

a. Pursuant to 40 CFR 63.342(f), all owners or operators subject to the standards in Condition 7.2.3(c) (i) (see also 40 CFR 63.342(c)) are subject to these work practice standards.

i. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by Condition 7.2.5(a) (iv) (see also 40 CFR 63.342(f) (3)) [40 CFR 63.342(f) (1) (i)].

ii. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by Condition 7.2.5(a) (iv) (see also 40 CFR 63.342(f) (3)) [40 CFR 63.342(f) (1) (ii)].

iii. Operation and maintenance requirements established pursuant to section 112 of the CAA are enforceable independent of emissions limitations or other requirements in relevant standards [40 CFR 63.342(f) (1) (iii)].

iv. Pursuant to 40 CFR 63.342(f) (3) (i), the owner or operator of an affected source subject to the work practices of Condition 7.2.5(a) (see also 40 CFR 63.342(f)) shall prepare an operation and maintenance plan. The plan shall include the following elements:

A. The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the

operation and maintenance of this equipment [40 CFR 63.342(f)(3)(i)(A)];

- B. Pursuant to 40 CFR 63.342(f)(3)(i)(B), for sources using an add-on air pollution control device or monitoring equipment to comply with 40 CFR 63 Subpart N, the plan shall incorporate the work practice standards for Packed-Bed Scrubber (PBS) systems or monitoring equipment, as identified in Table 1 of 40 CFR 63.342, as follows:

1. Visually inspect device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device once per quarter.
2. Visually inspect back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist once per quarter.
3. Visually inspect ductwork from tank to the control device once each quarter to ensure there are no leaks once per quarter.
4. Add fresh makeup water to the top of the packed bed whenever makeup is added. If greater than 50 percent of the scrubber water is drained (e.g., for maintenance purposes), makeup water may be added to the scrubber basin. For horizontal-flow scrubbers, top is defined as the section of the unit directly above the packing media such that the makeup water would flow perpendicular to the air flow through the packing. For vertical-flow units, the top is defined as the area downstream of the packing material such that the makeup water would flow countercurrent to the air flow through the unit.
5. For pitot tubes, once each quarter, backflush with water, or remove from the duct and rinse with fresh water. Replace in the duct and

rotate 180 degrees to ensure that the same zero reading is obtained. Check pitot tube ends for damage. Replace pitot tube if cracked or fatigued.

- C. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur [40 CFR 63.342(f)(3)(i)(D)]; and
 - D. The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions [40 CFR 63.342(f)(3)(i)(E)].
- v. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events [40 CFR 63.342(f)(3)(ii)].
- vi. To satisfy the requirements of Conditions 7.2.5(a)(iv) and (v) (see also 40 CFR 63.342(f)(3)), the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section [40 CFR 63.342(f)(3)(vi)].
- b. The standards in Conditions 7.2.3(c)(i) (see also 40 CFR 63.342) that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent [40 CFR 63.342(g)].

- c. The Permittee shall follow good operating practices for the scrubbers, including periodic inspection, routine maintenance and prompt repair of defects.

7.2.6 Emission Limitations

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

- a. Emissions and operation of the HX470 Chrome Plate System shall not exceed the following limits:
 - i. This permit is issued based upon a minimal hourly emission rate and negligible annual emissions (less than 0.1 ton/yr) of particulate matter from the two chrome plating tanks (MJ8968 and MJ8970). These limits are based on the maximum current usage of 110,244 amp-hr/day/tank and maximum 300 days of operation in a year.
 - ii. This permit is issued based on negligible emissions of particulate matter from the alkaline clean tank. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hr and 0.28 ton/yr.
 - iii. The above limitations were established in Construction Permit 89100062, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]
- 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).

7.2.7 Testing Requirements

Pursuant to Section 39.5(7)(b) of the Act, testing for chromium emissions from the affected plating tanks shall be performed upon reasonable request by the Illinois EPA as follows:

- a. Pursuant to 40 CFR 63.344(a), performance tests shall be conducted using the test methods and procedures in 40 CFR 63.344 and 40 CFR 63.7.
- b. Pursuant to 40 CFR 63.344(c), each owner or operator subject to the provisions of 40 CFR 63 Subpart N shall use the test methods identified in Condition 7.2.7 (see also 40 CFR 63.344) to demonstrate compliance with the standards in Condition 7.2.3(c) (i) (see also 40 CFR 63.342).
 - i. Method 306 or Method 306A "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations," appendix A of 40 CFR Part 63 shall be used to determine the chromium concentration from hard or decorative chromium electroplating tanks or chromium anodizing tanks. The sampling time and sample volume for each run of Methods 306 and 306A, appendix A of 40 CFR Part 63 shall be at least 120 minutes and 1.70 dscm (60 dscf), respectively. Methods 306 and 306A, appendix A of 40 CFR Part 63 a measurement of either total chromium or hexavalent chromium emissions. For the purposes of this standard, sources using chromic acid baths can demonstrate compliance with the emission limits of Condition 7.2.3(c) (i) (see also 40 CFR 63.342) by measuring either total chromium or hexavalent chromium. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations [40 CFR 63.344(c) (1)].
 - ii. Pursuant to 40 CFR 63.344(c) (2), the California Air Resources Board (CARB) Method 425 (which is available by contacting the California Air Resources Board, 1102 Q Street, Sacramento, California 95814) may be used to determine the chromium concentration from hard and decorative chromium electroplating tanks and chromium anodizing tanks if the following conditions are met:
 - A. If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33 to 66 micrograms of catch in the sampling train [40 CFR 63.344(c) (2) (i)].
 - B. If Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography with a Post-

column Reactor (ICPCR) analyses were used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR) [40 CFR 63.344(c) (2) (ii)].

C. In the case of either Condition 7.2.7(b) (ii) (A) or (B) (see also 40 CFR 63.344(c) (2) (i) or (ii)), a minimum of 3 separate runs must be conducted. The other requirements of 40 CFR 63.7 that apply to affected sources, as indicated in Table 1 of 40 CFR 63 Subpart N, must also be met [40 CFR 63.344(c) (2) (iii)].

iii. Alternate test methods may also be used if the method has been validated using Method 301, appendix A of 40 CFR Part 63 and if approved by the Illinois EPA and/or USEPA. Procedures for requesting and obtaining approval are contained in 40 CFR 63.7(f) [40 CFR 63.344(c) (4)].

7.2.8 Monitoring Requirements

a. Pursuant to 40 CFR 63.343(c), the owner or operator of an affected source subject to the emission limitations of 40 CFR 63 Subpart N shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

i. During the initial performance test, the owner or operator of an affected source, or group of affected sources under common control, complying with the emission limitations in Condition 7.2.3(c) (i) (see also 40 CFR 63.342) through the use of a packed-bed scrubber system shall determine the outlet chromium concentration using the procedures in Condition 7.2.7(b) (see also 40 CFR 63.344(c)), and shall establish as site-specific operating parameters the pressure drop across the system and the velocity pressure at the common inlet of the control device, setting the value that corresponds to

compliance with the applicable emission limitation using the procedures in Condition 7.2.8(c) and (d) (see also 63.344(d) (4) and (5)). An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the owner or operator may set as the compliant value the average pressure drop and inlet velocity pressure measured over the three test runs of one performance test, and accept ± 1 inch of water column from the pressure drop value and ± 10 percent from the velocity pressure value as the compliant range [40 CFR 63.343(c) (2) (i)].

- ii. On and after the date on which the initial performance test is required to be completed under 40 CFR 63.7, the owner or operator of an affected source, or group of affected sources under common control, shall monitor and record the velocity pressure at the inlet to the packed-bed system and the pressure drop across the scrubber system once each day that any affected source is operating. To be in compliance with the standards, the scrubber system shall be operated within ± 10 percent of the velocity pressure value established during the initial performance test, and within ± 1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant operating parameter values established during multiple performance tests [40 CFR 63.343(c) (2) (ii)].
- iii. If the owner or operator of an affected source uses both a fume suppressant and add-on control device and both are needed to comply with the applicable emission limit, monitoring requirements as identified in Conditions 7.2.8(a) (i) and (ii) (see also 40 CFR 63.343(c) (2)), and the work practice standards of Condition 7.2.5(a) (iv) (B) (see also Table 1 of 40 CFR 63.342), apply for each of the control techniques used [40 CFR 63.343(c) (7) (i)].
- iv. If the owner or operator of an affected source uses both a fume suppressant and add-on control device, but only one of these techniques is needed to comply with the applicable emission limit, monitoring requirements as identified in Conditions 7.2.8(a) (i) and (ii) (see also 40 CFR

63.343(c) (2)), and work practice standards of Condition 7.2.5(a) (iv) (B) (see also Table 1 of 40 CFR 63.342), apply only for the control technique used to achieve compliance [40 CFR 63.343(c) (7) (ii)].

- b. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system [40 CFR 63.344(d) (2)].
 - i. Specifications for differential pressure measurement devices used to measure velocity pressure shall be in accordance with section 2.2 of Method 2 (40 CFR part 60, appendix A) [40 CFR 63.344(d) (2) (i)].
 - ii. Specification for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with manufacturer's accuracy specifications [40 CFR 63.344(d) (2) (ii)].
- c. Pursuant to 40 CFR 63.344(d) (4), The owner or operator of a source required to measure the velocity pressure at the inlet to an add-on air pollution control device in accordance with Conditions 7.2.8(a) (i) and (ii) (see also 40 CFR 63.343(c) (2)), shall establish the site-specific velocity pressure as follows:
 - i. Locate a velocity traverse port in a section of straight duct that connects the hooding on the plating tank or tanks with the control device. The port shall be located as close to the control system as possible, and shall be placed a minimum of 2 duct diameters downstream and 0.5 diameter upstream of any flow disturbance such as a bend, expansion, or contraction (see Method 1, 40 CFR part 60, appendix A). If 2.5 diameters of straight duct work does not exist, locate the port 0.8 of the duct diameter downstream and 0.2 of the duct diameter upstream from any flow disturbance [40 CFR 63.344(d) (4) (i)].
 - ii. A 12-point velocity traverse of the duct to the control device shall be conducted along a single axis according to Method 2 40 CFR part

60, appendix A) using an S-type pitot tube; measurement of the barometric pressure and duct temperature at each traverse point is not required, but is suggested. Mark the S-type pitot tube as specified in Method 1 (40 CFR part 60, appendix A) with 12 points. Measure the velocity pressure (Δp) values for the velocity points and record. Determine the square root of the individual velocity point Δp values and average. The point with the square root value that comes closest to the average square root value is the point of average velocity. The Δp value measured for this point during the performance test will be used as the reference for future monitoring [40 CFR 63.344(d)(4)(ii)].

d. Pursuant to 40 CFR 63.344(d)(5), the owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with Conditions 7.2.8(a)(i) and (ii) (see also 40 CFR 63.343(c)(2)) may establish the pressure drop in accordance with the following guidelines:

i. Pursuant to 40 CFR 63.344(d)(5)(i), pressure taps shall be installed at any of the following locations:

A. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower [40 CFR 63.344(d)(5)(i)(A)];

B. On each side of the packed bed within the control system or on each side of each mesh pad within the control system [40 CFR 63.344(d)(5)(i)(B)]; or

C. On the front side of the first mesh pad and back side of the last mesh pad within the control system [40 CFR 63.344(d)(5)(i)(C)].

ii. Pursuant to 40 CFR 63.344(d)(5)(ii) pressure taps shall be sited at locations that are:

A. Free from pluggage as possible and away from any flow disturbances such as

cyclonic demisters [40 CFR
63.344(d) (5) (ii) (A)].

B. Situated such that no air infiltration at measurement site will occur that could bias the measurement [40 CFR
63.344(d) (5) (ii) (B)].

iii. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials [40 CFR
63.344(d) (5) (iii)].

iv. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop [40 CFR
63.344(d) (5) (iv)].

v. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer [40 CFR 63.344(d) (5) (v)].

vi. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required [40 CFR 63.344(d) (5) (vi)].

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

a. Pursuant to 40 CFR 63.346(b), the owner or operator of an affected source subject to the provisions of this subpart shall maintain the following records for such source:

i. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of Condition 7.2.5(a) (see also 40 CFR 63.342(f) and Table 1 of 40 CFR 63.342) have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct

- deficiencies found during the inspection [40 CFR 63.346(b)(1)];
- ii. Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment [40 CFR 63.346(b)(2)];
 - iii. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment [40 CFR 63.346(b)(3)];
 - iv. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan [40 CFR 63.346(b)(4)];
 - v. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by Condition 7.2.5(a)(iv) (see also 40 CFR 63.342(f)(3)) [40 CFR 63.346(b)(5)];
 - vi. Test reports documenting results of all performance tests [40 CFR 63.346(b)(6)];
 - vii. All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of 40 CFR 63.344(e) [40 CFR 63.346(b)(7)];
 - viii. Records of monitoring data required by Condition 7.2.8(a) (see also 40 CFR 63.343(c)) that are used to demonstrate compliance with the standard including the date and time the data are collected [40 CFR 63.346(b)(8)];
 - ix. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment [40 CFR 63.346(b)(9)];
 - x. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on

- air pollution control, or monitoring equipment
[40 CFR 63.346(b)(10)];
- xi. The total process operating time of the affected source during the reporting period [40 CFR 63.346(b)(11)];
 - xii. For sources using fume suppressants to comply with the standards, records of the date and time that fume suppressants are added to the electroplating or anodizing bath [40 CFR 63.346(b)(13)];
 - xiii. All documentation supporting the notifications and reports required by 40 CFR 63.9, 40 CFR 63.10, and 40 CFR 63.347 [40 CFR 63.346(b)(16)].
- b. The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Illinois EPA and/or USEPA for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR 63 Subpart N. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Illinois EPA and/or USEPA for a period of 5 years after each revision to the plan [40 CFR 63.342(f)(3)(v)].
- c. Records of the testing of chromium emissions from the affected plating tanks pursuant to Condition 7.2.7, which include the following [Section 39.5(7)(e) of the Act]:
- i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- d. The operating schedule of the affected plating tanks; and

- e. The monthly and aggregate annual chromium and PM emissions from the affected grinders based on the operating schedule and the typical hourly emission rate, with supporting calculations.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected plating 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. Pursuant to 40 CFR 63.347(g)(1), the owner or operator of an affected source that is located at a major source site shall submit a summary report to the Illinois EPA and/or USEPA to document the ongoing compliance status of the affected source. The report shall contain the information identified in Condition 7.2.10(c) (see also 40 CFR 63.347(g)(3)), and shall be submitted semiannually except when:
 - i. The Illinois EPA and/or USEPA determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source [40 CFR 63.347(g)(1)(i)]; or
 - ii. The monitoring data collected by the owner or operator of the affected source in accordance with Condition 7.2.8(a) (see also 40 CFR 63.343(c)) show that the emission limit has been exceeded, in which case quarterly reports shall be submitted. Once an owner or operator of an affected source reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency under Condition 7.2.10(b) (see also 40 CFR 63.347(g)(2)) is approved [40 CFR 63.347(g)(1)(ii)].
- b. Request to reduce frequency of ongoing compliance status reports:
 - i. Pursuant to 40 CFR 63.347(g)(2)(i), an owner or operator who is required to submit ongoing compliance status reports on a quarterly (or more frequent basis) may reduce the frequency of reporting to semiannual if all of the following conditions are met:

- A. For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit [40 CFR 63.347(g) (2) (i) (A)];
 - B. The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of Condition 7.2.9(a) and (b) (see also 40 CFR 63 Subpart A and 40 CFR 63 Subpart N) [40 CFR 63.347(g) (2) (i) (B)]; and
 - C. The Illinois EPA and/or the USEPA does not object to a reduced reporting frequency for the affected source, as provided in Condition 7.2.10(b) (ii) and (iii) (see also 40 CFR 63.347(g) (2) (ii) and (iii)) [40 CFR 63.347(g) (2) (i) (C)].
- ii. The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Illinois EPA and/or USEPA in writing of his or her intention to make such a change, and the Illinois EPA and/or USEPA does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Illinois EPA and/or USEPA may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the Illinois EPA and/or USEPA to make a judgment about the source's potential for noncompliance in the future. If the Illinois EPA and/or USEPA disapproves the owner or operator's request to reduce reporting frequency, the Illinois EPA and/or USEPA will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Illinois EPA and/or USEPA to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval

within 45 days, approval is automatically granted [40 CFR 63.347(g) (2) (ii)].

- iii. As soon as the monitoring data required by Condition 7.2.8(a) (see also 40 CFR 63.343(c)) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to quarterly, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Illinois EPA and/or USEPA to reduce the reporting frequency as allowed by paragraph Condition 7.2.10(b) (see also 40 CFR 63.347(g) (2)) [40 CFR 63.347(g) (2) (iii)].

- c. Pursuant to 40 CFR 63.347(g) (3), contents of ongoing compliance status reports. The owner or operator of an affected source for which compliance monitoring is required in accordance with Condition 7.2.8(a) (see also 40 CFR 63.343(c)) shall prepare a summary report to document the ongoing compliance status of the source. The report must contain the following information:
 - i. The company name and address of the affected source [40 CFR 63.347(g) (3) (i)];
 - ii. An identification of the operating parameter that is monitored for compliance determination, as required by Condition 7.2.8(a) (see also 40 CFR 63.343(c)) [40 CFR 63.347(g) (3) (ii)];
 - iii. The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status required by 40 CFR 63.347(e) [40 CFR 63.347(g) (3) (iii)];
 - iv. The beginning and ending dates of the reporting period [40 CFR 63.347(g) (3) (iv)];
 - v. A description of the type of process performed in the affected source [40 CFR 63.347(g) (3) (v)];

- vi. The total operating time of the affected source during the reporting period [40 CFR 63.347(g) (3) (vi)];
 - vii. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes [40 CFR 63.347(g) (3) (viii)];
 - viii. A certification by a responsible official, as defined in 40 CFR 63.2, that the work practice standards in Condition 7.2.5(a) (see also 40 CFR 63.342(f)) were followed in accordance with the operation and maintenance plan for the source [40 CFR 63.347(g) (3) (ix)];
 - ix. If the operation and maintenance plan required by Condition 7.2.5(a) (iv) (see also 40 CFR 63.342(f) (3)) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by Condition 7.2.10(d) (see also 40 CFR 63.342(f) (3) (iv)) documenting that the operation and maintenance plan was not followed [40 CFR 63.347(g) (3) (x)];
 - x. A description of any changes in monitoring, processes, or controls since the last reporting period [40 CFR 63.347(g) (3) (xi)];
 - xi. The name, title, and signature of the responsible official who is certifying the accuracy of the report [40 CFR 63.347(g) (3) (xii)]; and
 - xii. The date of the report [40 CFR 63.347(g) (3) (xiii)].
- d. If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by Condition 7.2.5(a) (iv) (see also 40 CFR 63.342(f) (3) (i)), the owner or operator shall

record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Illinois EPA and/or USEPA [40 CFR 63.342(f) (3) (iv)].

- e. Emissions of PM in excess of limits in Condition 7.2.6 within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

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

- a. Compliance with Condition 7.2.3 is assumed to be achieved by proper operation of the packed bed scrubber systems, as addressed by Condition 7.2.5.
- b. To determine compliance with Conditions 5.5.1 and 7.2.6, chromium and PM emissions from the affected plating tanks shall be calculated based on the following:

<u>Pollutant</u>	Emission Factor <u>(gr/dscf)</u>
chromium	2.1×10^{-5}
PM	4.4×10^{-5}

These are the emission factors for hard chromium electroplating with packed-bed scrubber, Table 12.20-1, AP-42, Volume I, Fifth Edition, Supplement D, July, 1996.

$$\text{Plating Emissions (lb/hr)} = (\text{Air Flow, cfm}) \times (\text{The Appropriate Emission Factor, gr/dscf}) \times (1 \text{ lb}/7,000 \text{ gr}) \times (60 \text{ min/hr})$$

7.3 Unit 03: Heat Treating Furnaces (MJ8859/61,8886/88,8889/91)
Control: None

7.3.1 Description

There are three large natural gas-fired direct harden/temper furnace combinations with firing rates of 6 - 8 mmBtu/hr, each. These are used to harden and temper castings as well as miscellaneous components (i.e., ground engaging tools, bearings, caps, etc.). The process being, parts loaded into the direct harden furnace which operates at 1,700°F, quenched with a polymer or water quench, then conveyed into a temper furnace operating at 1,000°F. The combination of these two processes imparts hardness and toughness to the part being heat treated.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 03	MJ8859: Electric Furnace Co. Model #4725-4-E Heat Treating Furnace with North American Gas Burner Tubes (MJ8859 Hardening Furnace, 3.165 mmBtu/hr)	None
	MJ8861: Electric Furnace Co. Model #4425-4-5 Heat Treating Furnace with North American Gas Burner Tubes (MJ8861 Temper Furnace, 1.175 mmBtu/hr)	None
	MJ8886: Electric Furnace Co. Model #4725-4-E Heat Treating Furnace with North American Gas Burner Tubes (MJ8886 Hardening Furnace, 3.784 mmBtu/hr)	None
	MJ8888: Electric Furnace Co. Model #4425-4-5 Heat Treating Furnace with North American Gas Burner Tubes (MJ8888 Temper Furnace, 2.505 mmBtu/hr)	None
	MJ8889: Electric Furnace Co. Model #4725-4-E Heat Treating Furnace with North American Gas Burner Tubes (MJ8889 Hardening Furnace, 3.784 mmBtu/hr)	None
	MJ8891: Electric Furnace Co. Model #4425-4-5 Heat Treating Furnace with North American Gas Burner Tubes (MJ8891 Temper Furnace, 2.505 mmBtu/hr)	None

7.3.3 Applicability Provisions and Applicable Regulations

- a. The heat treating and tempering furnaces are "affected furnaces" for the purpose of these unit-specific conditions.
- b. Each affected furnace is subject to the emission limits identified in Condition 5.2.2.
- c. The affected furnaces are subject to 35 IAC 212.321(a), which provides 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)].
 - ii. Because the expected process weight rate for the affected furnaces is 4,410 pounds per hour, combined the allowable PM emission rate for the affected furnaces set by 35 IAC 212.321 is 3.87 pounds per hour, combined.
- d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm [35 IAC 214.301].
- e. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected furnaces are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the actual heat input of each unit is less than 2.9 MW (10 mmBtu/hr) and the affected furnaces are not by definition fuel combustion emission units.
- b. The affected furnaces are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat

input of each unit is less than 73.2 MW (250 mmBtu/hr) and the affected furnaces are not by definition fuel combustion emission units.

- c. The affected furnaces are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM₁₀, as identified in 35 IAC 212.324(a)(1).

7.3.5 Operational and Production Limits and Work Practices

The affected furnaces shall only be operated with natural gas as the fuel.

7.3.6 Emission Limitations

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

- a.
 - i. Emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) from the hardening/temper furnaces MJ8859 and MJ 8861 shall not exceed 2.4 and 0.5 ton/year, respectively. These limits are based on the standard emission factors for natural gas, a maximum of 8,400 hours per year of operation, and the maximum firing rate.
 - ii. The above limitations were established in Construction Permit 89030028, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]
- b.
 - i. Emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) from the hardening/temper furnaces MJ8886 and MJ 8888 shall not exceed 2.4 and 0.5 ton/year, respectively. These limits are based on the standard emission factors for natural gas, a maximum of 8,400 hours per year of operation, and the maximum firing rate.
 - ii. The above limitations were established in Construction Permit 89030029, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that

the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

- c. i. Emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) from the hardening/temper furnaces MJ8889 and MJ 8891 shall not exceed 2.4 and 0.5 ton/year, respectively. These limits are based on the standard emission factors for natural gas, a maximum of 8,400 hours per year of operation, and the maximum firing rate.
 - ii. The above limitations were established in Construction Permit 89030030, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]
- d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

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 furnaces to demonstrate compliance with Conditions 5.5.1, 7.3.3, and 7.3.6 pursuant to Section 39.5(7) (b) of the Act:

- a. Records of the fuel usage for the affected furnaces, Mft³/mo and Mft³/yr;
- b. The operating schedule of the affected furnaces; and

- c. Records of monthly and aggregate annual CO, NO_x, PM, SO₂, and VOM emissions from the affected furnaces shall be maintained, based on fuel usage and the applicable emission factors, with supporting calculations.

7.3.10 Reporting Requirements

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

Emissions of CO and/or NO_x from the affected furnaces in excess of the limits specified in Condition 7.3.6 within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

- a. Compliance with Condition 7.3.3 is assumed by the work-practices inherent in operation of natural gas-fired heat treating furnaces.
- b. To determine compliance with Conditions 5.5.1 and 7.3.6, fuel combustion emissions from the affected furnaces shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/Mft³)</u>
CO	84
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

Heat Treating Furnace Emissions (lb) = (Natural Gas
Consumed, Mft³) x (The Appropriate Emission
Factor, lb/Mft³)

7.4 Unit 04: Natural Gas-Fired Boilers, B1, B4
Control: None

7.4.1 Description

The source uses steam heat to heat the entire plant as well as providing heat for certain processes (i.e., aqueous washers, low temperature ovens, etc.) The burners for these boilers are exclusively natural gas fired.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 04	B1: Springfield Boiler (Cleaver Brooks) Model Max W.P. 200 Natural Gas-Fired Boiler (Boiler #1), 110 mmBtu/hr	None
	B4: Springfield Boiler (Cleaver Brooks) Model Max W.P. 200 Natural Gas-Fired Boiler (Boiler #4), 137 mmBtu/hr	None

7.4.3 Applicability Provisions and Applicable Regulations

- a. Boilers #1 and #4 are "affected boilers" for the purpose of these unit-specific conditions.
- b. Each affected boiler is subject to the emission limits identified in Condition 5.2.2.
- c. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.4.4 Non-Applicability of Regulations of Concern

- a. The affected boilers are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion sources, because the actual heat input of is less than 73.2 MW (250 mmBtu/hr).
- b. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, Use Of Organic Material.

7.4.5 Operational and Production Limits and Work Practices

The affected boilers shall only be fired with natural gas as the fuel.

7.4.6 Emission Limitations

There are no specific emission limitations for these units, however, there are source wide emission limitations in Condition 5.5 that include these units.

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

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

- a. Natural gas fuel usage for the affected boilers, Mft³/mo and Mft³/yr; and
- b. Monthly and annual aggregate NO_x, PM, SO₂, and VOM emissions from the affected boilers shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the affected boilers 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

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

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

- a. Compliance with Conditions 7.4.3(c) is assumed to be achieved by the work-practices inherent in operation of natural gas-fired boilers.
- b. To determine compliance with the emission limits in Condition 5.5.1, emissions from the affected boilers burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	Natural Gas Emission Factor <u>(lb/Mft³)</u>
NO _x	280
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for large wall-fired boilers/uncontrolled/pre-NSPS (> 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

Boiler Emissions (lb) = (Natural Gas Consumed, Mft³)
x (The Appropriate Emission Factor, lb/Mft³)

7.5 Unit 05: Make-Up Air Heaters, AH1-4
Control: None

7.5.1 Description

In order to heat an addition to Building B, three 4.5 mmBtu/hr air make-up heaters were installed on the roof on the addition. The three units are identical and combustion products along with the heated air are exhausted to the building.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Rated Heat Input
Unit 05	AH1: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #1), 4.5 mmBtu/hr	None
	AH2: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #2), 4.5 mmBtu/hr	None
	AH3: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #3), 4.5 mmBtu/hr	None
	AH4: Industrial Commercial Equipment BMA 148 Model S Make-Up Air Heater (Make-Up Air Heater #4), 4.5 mmBtu/hr	None

7.5.3 Applicability Provisions and Applicable Regulations

- a. Make-Up Air Heaters #1, 2, and 3 are "affected heaters" for the purpose of these unit-specific conditions.
- b. Each affected heater is subject to the emission limits identified in Condition 5.2.2.
- c. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm [35 IAC 214.301].
- d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply to photochemically reactive material [35 IAC 218.301].

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected heaters are not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected heaters are not by definition fuel combustion emission units.
- b. The affected heaters are not subject to 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Sources, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr) and the affected heaters are not by definition fuel combustion emission units.
- c. This permit is issued based on the affected heaters not being subject to 35 IAC 212.321 because due to the unique nature of this process, such rules cannot reasonably be applied.
- d. The affected heaters are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM₁₀, as identified in 35 IAC 212.324(a)(1).

7.5.5 Operational and Production Limits and Work Practices

The affected heaters shall only be operated with natural gas as the fuel.

7.5.6 Emission Limitations

There are no specific emission limitations for these units however, there are source wide emission limitations in Condition 5.5 that include these units.

7.5.7 Testing Requirements

None

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected heaters to demonstrate compliance with Conditions 5.5.1 and 7.5.3, pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas fuel usage for the affected heaters, Mft³/mo and Mft³/yr; and

- b. Monthly and aggregate annual NO_x, PM, SO₂, and VOM emissions from the affected heaters shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.5.10 Reporting Requirements

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

None

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and formulas listed below:

- a. Compliance with Condition 7.5.3 is assumed to be achieved by the work-practices inherent in operation of natural gas-fired heaters.
- b. To determine compliance with the emission limits in Condition 5.5.1, emissions from the affected heaters burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	Natural Gas Emission Factor (lb/Mft ³)
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

$$\text{Heater Emissions (lb)} = (\text{Natural Gas Consumed, Mft}^3) \times (\text{The Appropriate Emission Factor, lb/Mft}^3)$$

7.6 Unit 06: Gasoline Storage Tank (TT0420)
Control: None

7.6.1 Description

The gas used in plant vehicles (e.g., cars and pickup trucks) is dispensed from an underground storage tank. The tank is a 10,000 gallon, double walled fiberglass tank, with leak detection in the annular space and with a vapor recovery vent.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 06	TT0420: Gasoline Storage Tank (10,000 gallons)	None

7.6.3 Applicability Provisions and Applicable Regulations

- a. Gasoline Storage Tank TT0420 is an "affected tank" for the purpose of these unit-specific conditions.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108 [35 IAC 218.122(b)].
- c. The affected tank is subject to 35 IAC 218.583(c), which provides no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless:
 - i. The tank is equipped with a submerged loading pipe [35 IAC 218.583(a)(1)]; and
 - ii. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
 - A. A vapor collection system that meets the requirements of Condition 7.6.5(c) (see also 35 IAC 218.583(d)(4)) [35 IAC 218.583(a)(2)(A)]; or
 - B. A refrigeration-condensation system or any other system approved by the Illinois

EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled [35 IAC 218.583(a)(2)(B)]; and

C. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 218.584(b) or (d) [35 IAC 218.583(a)(2)(C)]; and

iii. All tank vent pipes are equipped with pressure/vacuum relief valves with the pressure/vacuum relief valve shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column [35 IAC 218.583(a)(3)].

d. The affected tank is subject to 35 IAC 218.585, which provides that:

i. No person shall sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth in Conditions 7.6.3(e)(ii) and (e)(iii) (see also 35 IAC 218.585(b) and (c)) during the regulatory control periods, which shall be May 1 to September 15 for retail outlets, wholesale purchaser-consumer, operations, and all other operations [35 IAC 218.585(a)].

ii. The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 9.0 psi (62.07 kPa) during the regulatory control period in 1990 and each year thereafter [35 IAC 218.585(b)].

iii. The Reid vapor pressure of ethanol blend gasolines shall not exceed the limitations for gasoline set forth in Condition 7.6.3(e)(ii) (see also 35 IAC 218.585(b)) by more than 1.0 psi (6.9 kPa). Notwithstanding this limitation, blenders of ethanol blend gasolines whose Reid vapor pressure is less than 1.0 psi above the base stock gasoline immediately after blending with ethanol are prohibited from adding butane or any product that will increase the Reid vapor pressure of the blended gasoline [35 IAC 218.585(c)].

7.6.4 Non-Applicability of Regulations of Concern

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

7.6.5 Operational and Production Limits and Work Practices

- a. The affected tank shall only be used for the storage of gasoline.
- b. Pursuant to 35 IAC 218.583(c), each owner of a gasoline dispensing operation shall:
 - i. Install all control systems and make all process modifications required by Condition 7.6.3(b) (see also 35 IAC 218.583(a)) [35 IAC 218.583(c)(1)];
 - ii. Provide instructions to the operator of the gasoline dispensing operation describing

necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system [35 IAC 218.583(c)(2)]; and

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

7.6.6 Emission Limitations

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

- a. Emissions of volatile organic material from the gasoline storage tank shall not exceed 0.1 ton/year. This limit is based on standard emission factors for gasoline tanks and 25,000 gallons/year throughput of the tank.

- b. The above limitations were established in Construction Permit 86110017, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

7.6.7 Testing Requirements

- a. Pursuant to 35 IAC 218.583(a)(4), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless the owner or operator of a gasoline dispensing operation demonstrates compliance with Condition 7.6.3(c)(iii) (see also 35 IAC 218.583(a)(3)), by March 15, 1995 or 30 days after installation of each pressure/vacuum relief valve, whichever is later, and at least annually thereafter, by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate. The owner or operator shall maintain any records required by this Condition for a period of three years.
- b. Within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits of Condition 7.6.5(c)(4)(A) (see also 35 IAC 218.583(d)(4)(A)) [35 IAC 218.583(d)(5)].
- c. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the Reid vapor pressure of gasoline and the ethanol content of ethanol blend gasolines shall be determined according to the methods specified below:
 - i. Pursuant to 35 IAC 218.585(d), all sampling of gasoline required pursuant to the provisions of Conditions 7.6.7(c)(ii) and (c)(iii) (see also 35 IAC 218.585(e) and (f)) shall be conducted by one or more of the following approved methods or procedures:
 - A. For manual sampling, ASTM D4057 [35 IAC 218.585(d)(1)];
 - B. For automatic sampling, ASTM D4177 [35 IAC 218.585(d)(2)]; or

C. Sampling procedures for Fuel Volatility, 40 CFR 80 Appendix D [35 IAC 218.585(d)(3)].

ii. The Reid vapor pressure of gasoline shall be measured in accordance with either test method ASTM D323 or a modification of ASTM D323 known as the "dry method" as set forth in 40 CFR 80, Appendix E. For gasoline - oxygenate blends which contain water-extractable oxygenates, the Reid vapor pressure shall be measured using the dry method test [35 IAC 218.585(e)].

iii. The ethanol content of ethanol blend gasolines shall be determined by use of one of the approved testing methodologies specified in 40 CFR 80, Appendix F [35 IAC 218.585(f)].

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

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

a. Records of the testing of the affected tank pursuant to Condition 7.6.7, which include the following [Section 39.5(7)(e) of the Act]:

i. The date, place and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

b. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 IAC Part 218 other than those required by maintaining readily accessible records of the dimensions of the

storage vessel and analysis of the capacity of the storage vessel [35 IAC 218.129(f)].

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

7.6.10 Reporting Requirements

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

- a. Any storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.6.3(b) and (c)(i) (see also 35 IAC 218.122(b) and 218.583(a)(1)), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;
- b. Any storage of VOL in an affected tank that is out of compliance with the requirements of Conditions 7.6.3(b) and (c)(i) (see also 35 IAC 218.122(b) and 218.583(a)(1)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;
- c. Upon request by the Illinois EPA, the owner or operator of a gasoline dispensing operation which claims to be exempt from the requirements of 35 IAC 218.586 shall submit records to the Illinois EPA within 30 calendar days from the date of the request

which demonstrate that the gasoline dispensing operation is in fact exempt; and

- d. The storage of any VOL or VPL other than the material specified in Condition 7.6.5(a) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.6.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from each affected tank, the version 3.1 of the TANKS program is acceptable.

7.7 Unit 07: Boilers B2, B3
Control: Low NO_x Burners

7.7.1 Description

The source uses steam heat to heat the entire plant as well as providing heat for certain processes (i.e., aqueous washers, low temperature ovens, etc.). The burners for the boilers are natural gas fired, but may combust No. 2 distillate fuel oil for emergencies.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 07	B2: Springfield Boiler (Coen Burners) Model Max W.P. 200 Natural Gas/No. 2 Distillate Fuel Oil-Fired Boiler (Boiler #2, 112.6 mmBtu/hr (gas), 112.0 mmBtu/hr (oil))	Low NO _x Burner
	B3: Springfield Boiler (Coen Burners) Model Max W.P. 200 Natural Gas/No. 2 Distillate Fuel Oil-Fired Boiler (Boiler #3, 175 mmBtu/hr (gas), 119.888 mmBtu/hr (oil))	Low NO _x Burner

7.7.3 Applicability Provisions and Applicable Regulations

- a. Boilers #2 and 3 are "affected boilers" for the purpose of these unit-specific conditions.
- b. Each affected boiler is subject to the emission limits identified in Condition 5.2.2.
- c. The affected boilers are subject to the New Source Performance Standard (NSPS) for Commercial-Institutional Steam Generating Units 40 CFR 60, Subpart A and Db because each affected boiler is a steam generating unit that is fired with #2 fuel oil, with a heat input capacity greater than 100 mmBtu/hr and modified after June 19, 1984. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
 - i. Pursuant to 40 CFR 60.43b(f), Permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

- ii. The emission of nitrogen oxides (NO_x) into the atmosphere from any affected boiler, including during periods of startup, malfunction and breakdown, shall not exceed 0.1 lb/mmBtu for low heat release [40 CFR 60.44b(a)(1)(i)].
- d. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lb/mmBtu) [35 IAC 212.206].
- e. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- f. No person shall cause or allow the emission of sulfur dioxide in any one hour period from any new fuel combustion emission unit with actual heat input smaller than, or equal to 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively to 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)].

7.7.4 Non-Applicability of Regulations of Concern

- a. The affected boilers are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion sources, because the actual heat input of is less than 73.2 MW (250 mmBtu/hr).
- b. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, Use Of Organic Material.

7.7.5 Operational and Production Limits and Work Practices

- a. Pursuant to 40 CFR 60.11d, at all times including periods of start-up shutdown, and malfunction, the affected boiler shall maintain and operate the boiler in a manner consistent with good air pollution control practices.
- b. The affected boilers shall only be fired with natural gas and distillate fuel oil.
- c. The Permittee shall not utilize distillate fuel oil (Grades No. 1 and 2) in the affected boilers 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: Maximum wt. percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).
- d. Annual usage of #2 fuel oil for each boiler shall not exceed 135,000 gallons.

7.7.6 Emission Limitations

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

- a. Emissions of NO_x, CO, SO₂, PM and VOM from each affected boiler attributable to firing fuel oil shall not exceed 1.0, 0.25, 2.15, 0.1 and 0.01 tons/year, respectively. These limits are based on the manufacturer's guaranteed emission rate.
- 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).
- c. The above limitations were established in Permit 99070064, pursuant to 35 IAC Part 203 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 Title I of the CAA, specifically, 35 IAC Part 203 and the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.7.7 Testing Requirements

- a. The Permittee shall conduct a performance test for emissions of nitrogen oxides and opacity no later than 180 days after initial firing of oil or 60 days of firing oil at maximum rate, in accordance with 40 CFR 60.8, 60.11 and 60.46b.
- b. Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:
 - i. Measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance

with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].

- ii. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].
 - iii. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].
- c. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.7.3(b).

7.7.8 Monitoring Requirements

- a. The Permittee shall either monitor steam generating unit operating conditions and predict NO_x emissions in accordance with 40 CFR 60.48b(g)(2) and 60.49b(c) or install, calibrate, maintain and operate a continuous monitoring system for measuring the nitrogen oxide emissions discharged to the atmosphere and record the output of the system. This system shall be operated during all periods of operation of the affected boiler except for continuous monitoring system breakdowns and repairs. Data is to be recorded during calibration checks, and zero and span adjustments [40 CFR 60.48b].
- b. The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system or implement alternative monitoring provisions established by USEPA for the boilers pursuant to 40 CFR 60.13(i). Any opacity monitoring system shall be installed and operational prior to require performance testing (see Condition 7.7.7(a)), in accordance with 40 CFR 60.13(b) [40 CFR 60.48b(a)].

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected boiler to demonstrate compliance with Conditions 5.5.1, 7.7.3, 7.7.5, and 7.7.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain records of the following items and all applicable records required pursuant to 40 CFR 60.49b:
 - i. For each affected boiler operating day,
 - A. Calendar date [40 CFR 60.49b(g)(1)];
 - B. The average hourly nitrogen oxides emission rates (expressed in lb/million Btu heat input) measured or predicted [40 CFR 60.49b(g)(2)];
 - C. The 30-day average nitrogen oxides emission rates (lb/million Btu heat input) calculated at the end of each affected boiler operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 affected boiler operating days [40 CFR 60.49b(g)(3)];
 - D. Identification of the boiler operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken [40 CFR 60.49b(g)(4)];
 - E. Identification of the affected boiler operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient and a description of corrective actions taken [40 CFR 60.49b(g)(5)];
 - F. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data [40 CFR 60.49b(g)(6)];
 - G. Identification of "F" factor used for calculations, method of determination,

and type of fuel combusted [40 CFR 60.49b(g) (7)];

H. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system [40 CFR 60.49b(g) (8)];

I. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3 [40 CFR 60.49b(g) (9)];

J. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of 40 CFR 60 [40 CFR 60.49b(g) (10)];

ii. Pursuant to 40 CFR 60.49b(r) Permittee shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of the distillate oil as defined in 40 CFR 60.41b.

iii. Calculations of the annual capacity factor, determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar quarter, per quarter [40 CFR 60.49b(d)];

b. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:

i. The date, place and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

- c. Natural gas fuel usage for the affected boilers, Mft³/mo and Mft³/yr;
- d. Distillate fuel oil usage for the affected boilers, gal/mo and gal/yr;
- e. The sulfur content of the distillate fuel oil used in the affected boiler (% by Wt), this shall be recorded for each shipment of oil delivered to the source; and
- f. Monthly and annual aggregate CO, NO_x, PM, SO₂, and VOM emissions from the affected boilers shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected boilers 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. The Permittee shall submit periodic reports for monitoring activity conducted pursuant to Condition 7.7.8, in accordance with 40 CFR 60.7(c). The Permittee shall also follow guidelines for notification and reporting in accordance with 40 CFR 60.7(a).
- b. The Permittee shall submit excess emission reports for any calendar quarter during which there are excess emissions from the affected boiler. If there are no excess emissions during the calendar quarter, the Permittee shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. Excess emissions are defined as any calculated 30-day rolling average nitrogen oxides emission rate, as determined under 40 CFR 60.46b(e), which exceeds the applicable limits in 40 CFR 60.44b.
- c. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.7.7(b) (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].

- d. The use of distillate fuel oil with a sulfur content in excess of the limit specified in Condition 7.9.5(c) with the length of time this fuel was used and the effect on emissions of SO₂ within 30 days of this violation being detected.
- e. Emissions of CO, NO_x, PM, SO₂, and/or VOM in excess of the limit specified in Condition 7.7.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission factors and formulas listed below:

- a. Compliance with Conditions 7.7.3(b), (d) and (e) is assumed by the work-practices inherent in operation of natural gas-fired and distillate oil-fired boilers.
- b. Compliance with Condition 7.7.3(f) is assumed to be achieved by operation of the boiler with distillate fuel oil with a sulfur content meeting the specification of Condition 7.7.5(b).
- c. Compliance with the emission limits of Condition 5.5.1 shall be based on the emission factors listed below:
 - i. To determine compliance with Condition 5.5.1, emissions from the affected boilers burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	Natural Gas Emission Factor <u>(lb/Mft³)</u>
NO _x	280
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for large wall-fired boilers/uncontrolled/pre-NSPS (> 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

Boiler Emissions (lb) = (Natural Gas Consumed, Mft³) x (The Appropriate Emission Factor, lb/Mft³)

- ii. To determine compliance with Condition 5.5.1, emissions from the affected boilers burning distillate fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Natural Gas Emission Factor (lb/10³ gal)</u>
CO	5.0
NO _x	20.0
PM	2.0
SO ₂	42.6
VOM	0.25

These are the emission factors for #2 fuel oil usage from the manufacturer's guaranteed data.

Boiler Emissions (lb) = (Distillate Fuel Oil Consumed, gal) x (The Appropriate Emission Factor, lb/1000 gal)

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 March 29, 2004 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change and the Permittee provides written

notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change [Section 39.5(12)(a) of the Act]. This notice shall:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

A report summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

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

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

8.6.2 Test Notifications

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

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

8.6.3 Test Reports

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

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;

- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016
 - iii. Illinois EPA - Air Permit Section (MC 11)

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506
 - iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604
- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to comply with Title I requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6) (c) of the Act].

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7) (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 compliance certifications annually or more frequently as specified in the applicable requirement or by permit condition.

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

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission

limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

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

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

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

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

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

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

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

where

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

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

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

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

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

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

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

10.2 Attachment 2 - Example Certification by a Responsible Official

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

Signature _____

Name _____

Official Title _____

Telephone No. _____

Date Signed _____

10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.
2. Minor Permit Modification
 - Do not violate any applicable requirement;
 - Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



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

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	ID number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. ID number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents	
24. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25. Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:	
BY:	_____
_____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____/_____/_____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.5 Attachment 5 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT,

as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control

Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

SIS:psj