217/782-2113

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

PERMITTEE

API Industries, Inc.
Attn: Brian Beasley, Technical Manager
1250 Morse Avenue
Elk Grove Village, Illinois 60007

Application No.: 01110050 I.D. No.: 031440AHP
Applicant's Designation: Date Received: November 21, 2001
Operation of: Electroplating and Surface Coating
Date Issued: March 18, 2002 Expiration Date[2]: March 18, 2007
Source Location: 1250 Morse Avenue, Elk Grove Village, Cook County
Responsible Official: Brian Beasley, Technical Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a miscellaneous metal parts plating and coating source, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

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

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

DES:JS:psj

cc: Illinois EPA, FOS, Region 1

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

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

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1.0 SOURCE IDENTIFICATION

1.1 Source

API Industries, Inc.
1250 Morse Avenue
Elk Grove Village, Illinois 60007
847/437-7474

I.D. No.: 031440AHP
Standard Industrial Classification: 3471, Plating and Polishing

1.2 Owner/Parent Company

Servistar Alliance
400 South Curran Road
Grayslake, Illinois 60030

1.3 Operator

API Industries, Inc.
1250 Morse Avenue
Elk Grove Village, Illinois 60007

Brian Beasley, Technical Manager
847/437-7474

1.4 General Source Description

API Industries, Inc. is located at 1250 Morse Avenue in Elk Grove Village, Illinois. The source applies several finishes to mostly small steel parts. The source includes metal plating lines and organic coating lines to provide corrosion resistance, durability, or other functions as required. In addition, the source has heat treat furnaces to harden and temper the metal parts.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
ft^3	cubic foot
g	gram
gal	gallon
HAP	Hazardous Air Pollutant
HCl	hydrochloric acid
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatts
lb	pound
Mg	megagram
mmBtu	Million British thermal units
MW	megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
pH	a measure of the acidity or alkalinity of a solution
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New – identifies Title I conditions that are being established in this permit

T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
µg	microgram
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
wt. %	weight percent

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:

LES Boiler (B2, 4.05 mmBtu/hr)

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:

Soak Cleaner Tanks (SC1-SC6)
Electrocleaner Tanks (EC1-EC4)
Descaler Tank (DS1)
Caustic Tanks (CT1-CT2)
Brite Dip Tank (BD1)
Blue Chromate Tanks (BLC1-BLC4)
Yellow Chromate Tanks (YC1-YC4)
Bronze Chromate Tanks (BR1-BR3)
Olive Drab Chromate Tanks (ODC1-ODC3)
Black Chromate Tank (BLCK1)
Leach Tank (LT1)
Dye Tanks (CT1-CT3)
Copper Strip Tank (CST1)
Zinc Cobalt Plating Tank (ZCP-2)
Zinc Nickel Plating Tank (ZNP-2)
Zinc Chloride Plating Tank (ZP-2)
Hydrogen Embrittlement Ovens
Cleaver Brooks Boiler (B1, 4 mmBtu/hr)
Activator Tank (AT1)
Sealer Tank (ST1)
Macugard Tank (MGT1)
Caustic Strip Tank (CST1)
Paint Stripper Tank (PST1)
Miscellaneous Maintenance Activities (welding, saws)

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)].

Equipment used for the melting or application of less than 50,000 lbs/year of wax to which no organic solvent has been added [35 IAC 201.210(a)(7)].

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

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

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

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

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

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
ZNP-1	Zinc-Nickel Plating Tank	August 1984	None
ZSP-1	Zinc Strike Plating Tank	August 1984	None
ZP-1	Zinc Plating Tank	August 1984	None
P-1	Phosphating Tank	August 1984	None
ZCP-1	Zinc-Cobalt Plating Tank	August 1984	None
HCLT-1	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-2	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-3	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-4	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-5	Hydrochloric Acid Cleaning Tank	August 1984	None
CL-1	Electrolytic Coating Line with Oven (1.6 mmBtu/hr)	August 1984	None
CL-2	Dip Spin Coating Line with Oven (2.2 mmBtu/hr)	April 1985	None
CL-3	Dip Spin Coating Line with Oven (3.2 mmBtu/hr)	June 1987	None
CL-4	Dip Spin Coating Line with Oven (electric)	June 1987	None
CL-5	Dip Spin Coating Line with Oven (6.5 mmBtu/hr)	October 2000	None
HTF-1	Heat Treat Furnace (4.5 mmBtu/hr)	January 1989	None
HTF-2	Heat Treat Furnace (4.5 mmBtu/hr)	January 1989	None
HTF-3	Heat Treat Furnace (9.0 mmBtu/hr)	July 1995	None
HTF-4	Heat Treat Furnace (9.0 mmBtu/hr)	November 1995	None
OT-1	Oil Coating Tank	August 1984	None
OT-2	Oil Coating Tank	August 1984	None
OT-3	Oil Coating Tank	August 1984	None
OT-4	Oil Coating Tank	August 1984	None
SD-1	Sludge Dryer (1.0 mmBtu/hr)	1992	Cyclone/ Scrubber System

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM emissions.

5.1.2 This permit is issued based on the source being a major source of HAPs.

5.2 Applicable Regulations

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

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

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

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

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

5.2.3 Fugitive Particulate Matter Operating Program

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 Ozone Depleting Substances

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

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

c. This stationary source will be subject to 40 CFR Part 63, Subpart MMMM, Miscellaneous Metal Parts and Products (Surface Coating), when such rule becomes final and effective. The Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such regulation as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required under a final and effective rule.

5.2.7 Episode Action Plan

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

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

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

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

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	88.80
Sulfur Dioxide (SO_2)	0.06
Particulate Matter (PM)	60.01
Nitrogen Oxides (NO_x)	17.29
HAP, not included in VOM or PM	---
Total	166.16

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 VOM and HAP Emissions

The Permittee shall maintain records of the following items for each emission unit to quantify annual VOM and HAP emissions, so as to demonstrate compliance with the annual emission limits in Condition 5.5:

a. Aggregate monthly VOM emissions from emission units included in Section 7 of this permit; and

b. Aggregate monthly HAP emissions from emission units included in Sections 3 and 7 of this permit, calculated as a fraction of VOM emissions according to vapor weight percent.

5.6.3 Records for Operating Scenarios

N/A

5.6.4 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified

by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

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

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

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

5.7.2 Annual Emissions Report

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

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source. This may be included in the annual emissions report required pursuant to Condition 9.7.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

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

a. For the purpose of estimating fuel combustion and electroplating emissions from the emission units, the current version of AP-42, Sections 1.4 and 12.20, is acceptable.

b. For the purpose of estimating HAP emissions from equipment at the source, the vapor weight percent of each HAP for each organic liquid times the VOM emissions contributed by that organic liquid is acceptable.

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

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

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

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should 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

Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons, not including VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit. This limitation is established at the request of the

source to exempt it from the requirements of 35 IAC Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 IAC 205.205.

6.3 Recordkeeping and Reporting

a. The Permittee shall maintain the following records to determine compliance with the above limitation:

i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;

ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and

iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.

b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by November 30 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 IAC 205.205(b) and 35 IAC 205.300.

c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit - Plating Lines

7.1.1 Description

Small metal parts are sent to the plating lines for application of the required finish. Each of the wet processing lines contain cleaning tanks (both caustic and acidic) that clean the parts prior to being processed in the main process tank of the line (e.g., plating, phosphating). Plating operations generate mists, classified as PM emissions, due to evolution of hydrogen and oxygen gas.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ZNP-1	Zinc-Nickel Plating Tank	None
ZSP-1	Zinc Strike Plating Tank	None
ZP-1	Zinc Plating Tank	None
P-1	Phosphating Tank	None
ZCP-1	Zinc-Cobalt Plating Tank	None
HCLT-1	Hydrochloric Acid Cleaning Tank	None
HCLT-2	Hydrochloric Acid Cleaning Tank	None
HCLT-3	Hydrochloric Acid Cleaning Tank	None
HCLT-4	Hydrochloric Acid Cleaning Tank	None
HCLT-5	Hydrochloric Acid Cleaning Tank	None

7.1.3 Applicability Provisions and Applicable Regulations

a. The “affected plating lines” for the purpose of these unit-specific conditions, are electroplating lines and cleaning tanks which do not perform hard or decorative chromium electroplating, as described in Condition 7.1.2.

b. The affected plating lines are subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or

premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

7.1.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected plating lines not being subject to 40 CFR Part 63, Subpart N, because the affected plating lines are not receptacles or containers in which hard or decorative chromium electroplating or chromium anodizing occurs.

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

7.1.5 Operational And Production Limits And Work Practices

The affected plating lines shall not be used for chromium electroplating.

7.1.6 Emission Limitations

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

a. Emissions from the plating tanks, phosphating tanks, and HCl cleaning tanks shall not exceed the following limits:

Equipment	PM Emissions (Lb/Hour)	PM Emissions (Ton/Year)
Department 500 (ZNP-1, ZSP-1, HCLT-1)	0.70	3.08
Department 501 (ZP-1, HCLT-2)	0.72	3.16
Department 503 (P-1, HCLT-3)	0.71	3.12
Department 504 (ZCP-1, HCLT-4)	0.47	2.07
Department 509 (HCLT-5)	0.55	2.41
TOTAL	3.15	13.84

These limits are based on negligible PM emissions from various emission units in each department.

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

The above limitations were established in Permit 84070055, pursuant to 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 the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.1.7 Testing Requirements

None

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 each affected plating line to demonstrate compliance with Conditions 5.5.1, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. Types of metal coatings applied in the affected plating lines;

b. Amount of chemicals added to each affected plating line (lb/month and lb/year);

c. Amount of parts processed through each affected plating line (ton/month and ton/year); and

d. The aggregate monthly and annual PM emissions from each affected plating line based on the material usage, with supporting calculations.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected plating 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. Emissions of PM in excess of the limits specified in Condition 5.5.1 or 7.1.6 based on the current month’s records plus the preceding 11 months shall be reported within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

a. Compliance with the PM emission limits in Conditions 7.1.3 and 7.1.6 is assured by proper operation, maintenance, and work practices of the affected plating lines.

b. PM emissions shall be determined by the emission factors from Section 12.20 of AP-42, Volume I, Fifth Edition, July 1996, other appropriate engineering estimates, or the following emission factors:

Equipment	Emissions (% of chemicals added)
ZNP-1, ZP-1, ZCP-1	2%
ZSP-1	3%
P-1, HCLT-1 through HCLT-5	4%

7.2 Unit - Coating Lines

7.2.1 Description

Small metal parts are sent to the coating lines for application of the required finish. Coating operations generate VOM and HAP emissions from evaporation of the solvents contained in or added to the coatings. In addition, products of fuel combustion are emitted from four curing/drying ovens fired with natural gas.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
CL-1	Electrolytic Coating Line with Oven (1.6 mmBtu/hr)	None
CL-2	Dip Spin Coating Line with Oven (2.2 mmBtu/hr)	None
CL-3	Dip Spin Coating Line with Oven (3.2 mmBtu/hr)	None
CL-4	Dip Spin Coating Line with Oven (electric)	None
CL-5	Dip Spin Coating Line with Oven (6.5 mmBtu/hr)	None
OT-1	Oil Coating Tank	None
OT-2	Oil Coating Tank	None
OT-3	Oil Coating Tank	None
OT-4	Oil Coating Tank	None

7.2.3 Applicability Provisions and Applicable Regulations

a. The “affected coating operations” for the purpose of these unit-specific conditions, are coating lines and coating tanks used to apply coatings to miscellaneous metal parts, as described in Condition 7.2.2, including associated curing and drying ovens.

b. Each affected coating operation at the source is subject to 35 IAC 218.204(j): Miscellaneous Metal Parts and Products Coating, which provides that:

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

Description	kg/liter	lb/gal
Clear Coating	0.52	4.3
Air Dried Extreme Performance Coating	0.42	3.5
Baked Extreme Performance Coating	0.40	3.3
Other Air Dried Coating	0.40	3.3
Other Baked Coating	0.34	2.8

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

c. Each affected coating operation at the source is subject to 35 IAC 212.321(a), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see Attachment 2) [35 IAC 212.321(a)].

7.2.4 Non-Applicability of Regulations of Concern

a. Each affected coating operation is not subject to 35 IAC 218.301, use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material. This rule excludes coating lines which use coatings that comply with 35 IAC 218.204 from this requirement.

b. The curing and drying ovens on the affected coating operations 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 curing and drying ovens are not by definition fuel combustion emission units.

c. The curing and drying ovens on the affected coating operations 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 curing and drying ovens are not by definition fuel combustion emission units.

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

7.2.5 Operational And Production Limits And Work Practices

a. The curing and drying ovens on the affected coating operations shall only be operated with electricity for power or with natural gas as a fuel.

b. In the event that the operation of an affected coating operation results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.

7.2.6 Emission Limitations

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

a. Emissions from the listed coating lines shall not exceed the following limits:

	VOM Emissions	
Equipment	(Ton/Month)	(Ton/Year)
CL-1 and CL-2	---	20.7
CL-5	2.1	21.3

These limits are based on the coating usage and VOM emissions calculated using the procedures in Condition 7.2.12.

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

The above limitations were established in Permits 84070055 and 00060072, pursuant to 35 IAC Part 203. 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 [T1].

b. Emissions of VOM from the oil coating tanks (OT-1 through OT-4) shall not exceed nominal emission rates of 0.01 lb/hour and 0.044 ton/year from each emission unit.

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

The above limitations were established in Permit 84070055 [T1].

c. This permit is issued based on no emissions of VOM from clean-up operations, and no emissions of HAP from the affected coating operations.

7.2.7 Testing Requirements

Testing for VOM content of coatings and other materials shall be performed as follows [35 IAC 218.105(a), 218.204, and Section 39.5(7)(b) of the Act]

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 7.2.9(b) (see also 35 IAC 218.211) [35 IAC 218.211(a)].

b. Upon reasonable request by the Illinois EPA, the VOM content of specific coatings used on the affected coating operations 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).

i. The VOM content of representative coatings “as applied” on the affected coating operations 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 7.2.9(b) directly reflect the application of such material and separately account for any additions of solvent.

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating operation to demonstrate compliance with Conditions 5.5.1, 7.2.3, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

a. Records of the testing of VOM and HAP content (wt%) of each coating as tested pursuant to the conditions of this section, which include the following [Section 39.5(7)(e) of the Act]:

   i. Identification of material tested;

   ii. Results of analysis;

   iii. Documentation of analysis methodology; and

   iv. Person performing analysis.

b. The Permittee shall collect and record all of the following information each day for the affected coating operations:

   i. The name and identification number of each coating as applied on each affected coating operation [35 IAC 218.211(c)(2)(A)]; 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 each affected coating operation [35 IAC 218.211(c)(2)(B)].

c. The Permittee shall also collect and record the following operational information:

   i. Types of substrate material coated on each affected coating operation;

   ii. Records of the coating usage for each affected coating operation, gal/month, and gal/year;

   iii. The VOM and HAP content of each coating as applied, wt%;

   iv. Density of coatings, lb/gal;

   v. Records of the solvent usage for each affected coating operation, gal/day, gal/month and gal/year;

vi. Density of solvent, lb/gal; and

vii. Natural gas fuel usage of the curing and drying ovens on the affected coating operations, ft^3/month and ft^3/year.

d. The aggregate monthly and annual VOM and HAP emissions from each affected coating operation based on the material usage, with supporting calculations.

e. The aggregate monthly and annual NO_x, PM, SO_2, and VOM emissions from the curing and drying ovens on the affected coating operations, based on fuel usage and the applicable emission factors, with supporting calculations.

7.2.10 Reporting Requirements

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

i. The Permittee shall notify the Illinois EPA of any record showing violation of 35 IAC 218.204 (see also Condition 7.2.3(b)) within 30 days following the occurrence of the violation [35 IAC 218.211(c)(3)(A)].

ii. Emissions of VOM in excess of the limits specified in Condition 5.5.1 or 7.2.6 based on the current month's records plus the preceding 11 months shall be reported within 30 days of such an occurrence.

b. The Permittee shall notify the Illinois EPA at least 30 calendar days before changing the method of compliance from 35 IAC 218.204 (numerical VOM content limit) to 35 IAC 218.205 (daily-weighted average limitation). Such notification shall follow the requirements of 35 IAC 218.211(d)(1) (see also Condition 7.2.10(c)). Upon changing the method of compliance as stated above, the Permittee shall comply with all the requirements of 35 IAC 218.211(d) [35 IAC 218.211(c)(3)(B)].

c. Upon changing the method of compliance for the affected coating operations from 35 IAC 218.204 (numerical VOM content limit) to 35 IAC 218.205 (daily-weighted average limitation), the owner or operator of the subject coating lines shall certify

to the Illinois EPA that the subject coating lines will be in compliance with 35 IAC 218.205 on and after the initial start-up date following the change. Such certification shall include:

i. The name and identification number of each coating line which will comply by means of 35 IAC 218.205;

ii. The name and identification number of each coating as applied on each coating line;

iii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;

iv. The instrument or method by which the owner or operator will accurately measure or calculate the volume of each coating as applied each day on each coating line;

v. The method by which the owner or operator will create and maintain records each day as required in 35 IAC 218.211(d)(2); and

vi. An example of the format in which the records required in 35 IAC 218.211(d)(2) will be kept.

[35 IAC 218.211(d)]

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

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

a. Usage of coatings, thinners, or solvents at this source with various VOM contents provided that the materials are tested in accordance with the conditions of this permit and the affected coating operation remains in compliance with the requirements of this permit.

7.2.12 Compliance Procedures

a. To determine compliance with Conditions 5.5.1 and 7.2.6, PM and VOM emissions from the affected coating

operations shall be calculated based on the following:

i. Particulate Matter Emissions (Spray Application):

PM (lb) = (Coating Usage, gal) x (Coating Density, lb/gal) x (Wt% Solids) x [1 - (Transfer Efficiency (%)/100)]

ii. Volatile Organic Material Emissions:

VOM (lb) = (Coating Usage, gal) x (Coating Density, lb/gal) x (VOM Content of Coating, wt%)

b. Compliance of each coating with the VOM emission limitations in Condition 7.2.3(b) shall be based on the recordkeeping requirements in Condition 7.1.9 and by the use of either testing as required in Condition 7.2.7 or by use of the formulae listed below:

VOM Coating Content = V x D/[1 - W x D]

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$W = \Sigma(w_i/d_i)$

Where:

w_i = Percent exempt compound i in the coating,

d_i = Overall density of exempt compound i, in lb/gal

and the summation Σ is applied over water and all exempt compounds i, in the coating.

c. Fuel combustion emissions from the affected coating operation curing and drying ovens shall be calculated based on the following emission factors:

Pollutant	Emission Factor ($lb/10^6\ ft^3$)
PM	7.4
SO_2	0.6
VOM	5.5
NO_x	100.0

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

Oven Emissions (lb) = Natural Gas Consumed (10^6 ft^3) * the appropriate emission factor (lb/10^6 ft^3).

7.3 Unit - Heat Treat Furnaces

7.3.1 Description

Following application of a metal or organic coating finish, metal parts are hardened, quenched, and then tempered in a heat treat furnace.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
HTF-1	Heat Treat Furnace (4.5 mmBtu/hr)	None
HTF-2	Heat Treat Furnace (4.5 mmBtu/hr)	None
HTF-3	Heat Treat Furnace (9.0 mmBtu/hr)	None
HTF-4	Heat Treat Furnace (9.0 mmBtu/hr)	None

7.3.3 Applicability Provisions and Applicable Regulations

a. The “affected furnaces” for the purpose of these unit-specific conditions, are emission units used for heat treating finished metal parts, as described in Condition 7.3.2.

b. Each affected furnace is subject to the emission limits identified in Condition 5.2.2.

7.3.4 Non-Applicability of Regulations of Concern

a. The affected furnaces are not subject to 35 IAC 216.121, because the actual heat input of each affected furnace is less than 2.9 MW (10 mmBtu/hr).

b. The affected furnaces are not subject to 35 IAC 217.141, because the actual heat input of each affected furnace is less than 73.2 MW (250 mmBtu/hr).

c. The affected furnaces are not subject to 35 IAC 218.301, Use of Organic Material, because the provisions of 35 IAC 218.301 and 218.302 shall not apply to fuel combustion emission units [35 IAC 218.303].

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

7.3.5 Operational And Production Limits And Work Practices

None

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. Emissions from the affected furnaces shall not exceed the following limits:

Equipment	NO_x Emissions (Lb/Hour)	NO_x Emissions (Ton/Year)
HT-1	0.65	2.85
HT-4	0.65	2.85

These limits are based on the furnace firing rate and standard emission factors.

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

The above limitations were established in Permit 84070055, pursuant to 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 the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

b. Emissions of VOM from the affected furnaces shall not exceed nominal emission rates of 0.01 lb/hour and 0.044 ton/year from each emission unit.

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

The above limitations were established in Permit 84070055 [T1].

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

a. Total natural gas usage in each affected furnace (ft^3/month and ft^3/year); and

b. Records of annual aggregate NO_x, PM, SO_2, and VOM emissions based on fuel consumption and the applicable emission factors, with supporting calculations.

7.3.10 Reporting Requirements

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

a. Notification within 60 days of operation of an affected furnace that may not have been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of the records for each incident.

b. Emissions of NO_x, PM, SO_2, and VOM in excess of the limits specified in Condition 5.5.1 or 7.3.6 based on the current month's records plus the preceding 11 months shall be reported 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 in Condition 5.5.1 and 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

a. Emissions from the affected furnaces burning natural gas shall be calculated based on the most recent

stack test emission factors or the following emission factors:

Pollutant	Emission Factor ($lb/10^6\ ft^3$)
PM	7.4
SO_2	0.6
VOM	5.5
NO_x	100.0

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

Boiler Emissions (lb) = Natural Gas Consumed (10^6 ft^3) * the appropriate emission factor ($lb/10^6\ ft^3$).

7.4 Unit - Sludge Dryer
Control - Cyclone/Scrubber System

7.4.1 Description

Process rinse waters and spent solutions from the wet process lines are treated at this source in the Wastewater Treatment Area, which consists of pH neutralization/adjustment, chromium reduction, clarification, and filtration. The sludge that is generated in this wastewater treatment system is dewatered in a sludge dryer. The PM emissions from the sludge dryer are controlled with a cyclone/scrubber system.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
SD-1	Sludge Dryer (1.0 mmBtu/hr)	Cyclone / Scrubber System

7.4.3 Applicability Provisions and Applicable Regulations

a. The “affected sludge dryer” for the purpose of these unit-specific conditions, is an emission unit used to remove water from waste sludge, as described in Condition 7.4.2.

b. The affected sludge dryer are subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

c. The affected sludge dryer is subject to 40 CFR 61, Subpart E, National Emission Standard for Mercury, because the affected sludge dryer is used to reduce the moisture content of a sludge produced by industrial waste water treatment. The Illinois EPA is administering these standards in Illinois on behalf of the USEPA under a delegation agreement.

d. The affected sludge dryer is subject to the emission limits identified in Condition 5.2.2.

7.4.4 Non-Applicability of Regulations of Concern

a. The affected sludge dryer is not subject to 35 IAC 216.121, because the actual heat input of the affected sludge dryer is less than 2.9 MW (10 mmBtu/hr) and the affected sludge dryer is not by definition a fuel combustion emission unit.

b. The affected sludge dryer is not subject to 35 IAC 217.141, because the actual heat input of the affected sludge dryer is less than 73.2 MW (250 mmBtu/hr) and the affected sludge dryer is not by definition a fuel combustion emission unit.

c. This permit is issued based on the affected sludge dryer not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected sludge dryer does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.4.5 Operational And Production Limits And Work Practices

a. No changes shall be made in the operation of the affected sludge dryer which would potentially increase mercury emissions above the level determined by the most recent sludge test, until the new emission level has been estimated by calculation and the results reported to the Illinois EPA [40 CFR 61.53(d)(4) and 61.54(e)].

7.4.6 Emission Limitations

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

a. Emissions of NO_x and PM from the affected sludge dryer shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year for each pollutant.

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

The above limitations were established in Permit 84070055 [T1].

b. Emissions to the atmosphere from the affected sludge dryer shall not exceed 3.2 kg (7.1 lb) of mercury per 24-hour period [40 CFR 61.52(b)].

7.4.7 Testing Requirements

Unless a waiver of emission testing is obtained under 40 CFR 61.13, the Permittee shall test mercury emissions from the affected sludge dryer in accordance with the procedures set forth in either Condition 7.4.7(a) or (b) (see also 40 CFR 61.53(d) or 40 CFR 61.54) [40 CFR 61.53(d)(1)].

a. Stack Sampling

i. Method 101A in Appendix B of 40 CFR 61 shall be used to test emissions [40 CFR 61.53(d)(2)];

ii. Samples shall be taken over such a period or periods as are necessary to determine accurately the maximum emissions which will occur in a 24-hour period [40 CFR 61.53(d)(4)]; and

iii. Samples shall be analyzed and mercury emissions shall be determined within 30 days after the stack test [40 CFR 61.53(d)(5)].

b. Sludge Sampling

i. As an alternative to Condition 7.4.7(a), the Permittee may use Method 105 in Appendix B of 40 CFR 61 to test emissions [40 CFR 61.54(a)];

ii. A total of three composite samples shall be obtained within an operating period of 24 hours. When the 24-hour operating period is not continuous, the total sampling period shall not exceed 72 hours after the first grab sample is obtained. Samples shall not be exposed to any condition that may result in mercury contamination or loss [40 CFR 61.54(c)(1)];

iii. The maximum 24-hour period sludge incineration or drying rate shall be determined by use of a flow rate measurement device that can measure the mass rate of sludge charged to the incinerator or dryer with an accuracy of ±5 percent over its operating range. Other methods of measuring sludge mass charging rates may be used if they have received prior approval by the Illinois EPA [40 CFR 61.54(c)(2)]; and

iv. The sampling, handling, preparation, and analysis of sludge samples shall be accomplished according to Method 105 in Appendix B of 40 CFR 61 [40 CFR 61.54(c)(3)].

7.4.8 Monitoring Requirements

a. If mercury emissions exceed 1.6 kg (3.5 lb) per 24-hour period, demonstrated either by stack sampling or sludge sampling according to Condition 7.4.7 (see also 40 CFR 61.53 and 61.54), the Permittee shall monitor mercury emissions at intervals of at least once per day by use of Method 105 of Appendix B in 40 CFR 61 or the procedures specified in 40 CFR 61.53(d)(2) and (4) [40 CFR 61.55(a)].

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 sludge dryer to demonstrate compliance with Conditions 5.5.1 and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

a. Hours of operation of the affected sludge dryer (hour/month and hour/year);

b. Total natural gas usage in the affected sludge dryer (ft^3/month and ft^3/year);

c. Records of emission test results and other data needed to determine total emissions, or records of sludge sampling, charging rate determination, and other data needed to determine mercury content of wastewater treatment plant sludges [40 CFR 61.53(d)(6) and 61.54(g)]; and

d. Records of annual aggregate NO_x, PM, SO_2, and VOM emissions based on fuel consumption and the applicable emission factors, with supporting calculations.

7.4.10 Reporting Requirements

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

i. Notification within 60 days of operation of the affected sludge dryer that may not have

been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of the records for each incident.

ii. Emissions of NO_x, PM, SO_2, and VOM in excess of the limits specified in Condition 5.5.1 or 7.4.6 based on the current month's records plus the preceding 11 months shall be reported within 30 days of such an occurrence.

b. Each determination of mercury emissions shall be reported to the Illinois EPA by a registered letter dispatched within 15 calendar days following the date such determination is completed [40 CFR 61.53(d)(5) and 61.54(f)].

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

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

a. PM emissions from the affected sludge dryer shall be based on the most recent stack test emission factor or the following equation:

PM Emissions (lb) = Operating Hours (hour) * 0.0148 lb/hour

where 0.0148 lb/hr is the average emission rate based on a test of similar equipment.

b. Emissions from the affected sludge dryer attributed to the burning of natural gas shall be calculated based on the most recent stack test emission factors or the following emission factors:

Pollutant	Emission Factor ($lb/10^6\ ft^3$)
PM	7.4
SO_2	0.6
VOM	5.5
NO_x	100.0

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

Dryer Emissions (lb) = Natural Gas Consumed (10^6 ft^3) * the appropriate emission factor (lb/10^6 ft^3).

c. If the Permittee follows the testing alternative in Condition 7.4.7(b), mercury emissions shall be determined by use of the following equation:

$$E_{Hg} = \frac{M * Q * F_{sm(avg)}}{1000}$$

Where:

E_{Hg} = Mercury emissions, g/day

M = Mercury concentration of sludge on a dry solids basis, µg/g

Q = Sludge charge rate, kg/day

F_{sm} = Weight fraction of solids in the collected sludge after mixing

1000= Conversion factor, kg µg/g ^{2}.

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 January 31, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

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

8.6.2 Test Notifications

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

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

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

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

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

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (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

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

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

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

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

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

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

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

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

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

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.2 Attachment 2 - Particulate Matter Emissions from Process Emission Units

10.2.1 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972 (35 IAC 212.321)

a. Except as further provided in 35 IAC Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

Where:

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

1. Up to process weight rates of 408 Mg/hr (450 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

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

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/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 14,1972

Metric		English	
P Mg/hr	E kg/hr	P Ton/hr	E lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	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.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

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?		☐ Yes ☐ 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? ☐ Owner ☐ Operator	20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ 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?	☐ Yes ☐ 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?	☐ Yes ☐ 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?	☐ Yes ☐ No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ 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.	☐ Yes ☐ 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?	☐ Yes ☐ No ☐ 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

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

API Industries, Inc. is located at 1250 Morse Avenue in Elk Grove Village, Illinois. The source applies several finishes to mostly small steel parts. The source includes metal plating lines and organic coating lines to provide corrosion resistance, durability, or other functions as required. In addition, the source has heat treat furnaces to harden and temper the metal parts.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
ZNP-1	Zinc-Nickel Plating Tank	August 1984	None
ZSP-1	Zinc Strike Plating Tank	August 1984	None
ZP-1	Zinc Plating Tank	August 1984	None
P-1	Phosphating Tank	August 1984	None
ZCP-1	Zinc-Cobalt Plating Tank	August 1984	None
HCLT-1	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-2	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-3	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-4	Hydrochloric Acid Cleaning Tank	August 1984	None
HCLT-5	Hydrochloric Acid Cleaning Tank	August 1984	None
CL-1	Electrolytic Coating Line with Oven (1.6 mmBtu/hr)	August 1984	None
CL-2	Dip Spin Coating Line with Oven (2.2 mmBtu/hr)	April 1985	None
CL-3	Dip Spin Coating Line with Oven (3.2 mmBtu/hr)	June 1987	None
CL-4	Dip Spin Coating Line with Oven (electric)	June 1987	None
CL-5	Dip Spin Coating Line with Oven (6.5 mmBtu/hr)	October 2000	None
HTF-1	Heat Treat Furnace (4.5 mmBtu/hr)	January 1989	None
HTF-2	Heat Treat Furnace (4.5 mmBtu/hr)	January 1989	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
HTF-3	Heat Treat Furnace (9.0 mmBtu/hr)	July 1995	None
HTF-4	Heat Treat Furnace (9.0 mmBtu/hr)	November 1995	None
OT-1	Oil Coating Tank	August 1984	None
OT-2	Oil Coating Tank	August 1984	None
OT-3	Oil Coating Tank	August 1984	None
OT-4	Oil Coating Tank	August 1984	None
SD-1	Sludge Dryer (1.0 mmBtu/hr)	1992	Cyclone / Scrubber System

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	88.80
Sulfur Dioxide (SO_2)	0.06
Particulate Matter (PM)	60.01
Nitrogen Oxides (NO_x)	17.29
HAP, not included in VOM or PM	---
Total	166.16

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board’s emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the 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.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source’s permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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