FINAL DRAFT/PROPOSED CAAPP PERMIT
Harper-Wyman Company
I.D. No.: 011085AAC
Application No.: 98080014
October 4, 2002

217/782-2113

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

PERMITTEE

Harper-Wyman Company
Attn: Peter H. Nelson, Environmental Coordinator
525 Elm Place
Princeton, Illinois 61356

Application No.: 98080014 I.D. No.: 011085AAC
Applicant's Designation: Date Received: August 6, 1998
Operation of: Miscellaneous Metal and Plastic Parts Manufacturing
Date Issued: TO BE DETERMINED Expiration Date[2]: TO BE DETERMINED
Source Location: 525 Elm Place, Princeton, Bureau County
Responsible Official: Peter H. Nelson, Environmental Coordinator

This permit is hereby granted to the above-designated Permittee to OPERATE a miscellaneous metal and plastic parts manufacturing 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 2

[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

Harper-Wyman Company
525 Elm Place
Princeton, Illinois 61356
815/875-2851

I.D. No.: 011085AAC
Standard Industrial Classification: 3489, Fabricated Pipe and Fittings

1.2 Owner/Parent Company

Oak Industries, Inc.
1000 Winter Street
Waltham, Massachusetts 02154

1.3 Operator

Harper-Wyman Company
525 Elm Place
Princeton, Illinois 61356

Peter H. Nelson, Environmental Coordinator
815/875-2851

1.4 General Source Description

The Harper-Wyman Company is located at 525 Elm Place in Princeton, Illinois. The source manufactures various oven and combustion components, such as heating elements, valves, and burners. The manufacturing processes include cutting, stamping, grinding, brazing, and polishing of metal and plastic. Additional activities include plastic injection molding, aluminum die casting, a groundwater remediation system, aluminum valve machining, and solvent cleaning.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
Btu	British thermal unit
°C	degrees Celsius
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
°F	degrees Fahrenheit
ft^3	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kPa	kilopascals
kW	kilowatts
lb	pound
mmBtu	Million British thermal units
mmHg	millimeters of mercury
MW	megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psi	pounds per square inch
RMP	Risk Management Plan
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit

T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Groundwater Remediation System

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:

Aluminum Die Casting Furnace

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)].

Die casting machines where a metal or plastic is formed under pressure in a die [35 IAC 201.210(a)(12)].

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

3.2 Compliance with Applicable Requirements

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

Permittee shall comply with the following requirements, as applicable:

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

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

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

3.3 Addition of Insignificant Activities

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

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

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

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Kewanee Boiler (4.25 mmBtu/hr)	April 2000	None
02	Phillips Ultrasonic Vapor Degreaser and Solvent Recovery Still	1960	None
03	Detrex Vapor Degreaser and Solvent Recovery Still	September 1999	None
04	6 Aluminum Valve Machines	4 in 1979; 2 in 1993	Oil Mist Collectors

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 HAP emissions.

5.2 Applicable Regulations

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

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

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

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

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

c. No person shall cause or allow the total emissions of sulfur dioxide into the atmosphere in any one hour period from all fuel combustion emission sources to exceed the emissions determined by 35 IAC 214.183 [35 IAC 214.182].

Compliance with this requirements is considered to be assured by the inherent operating conditions of all fuel combustion emission units combusting natural gas.

5.2.3 Ozone Depleting Substances

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

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

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

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

5.2.4 Risk Management Plan

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

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

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

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

compliance certification, as required by 40 CFR Part 70 or 71.

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

5.2.6 Episode Action Plan

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

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

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

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

i. Illinois EPA, Compliance Section; and

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

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

5.3 Non-Applicability of Regulations of Concern

5.3.1 This permit is issued based on the source not being subject to 40 CFR Part 63, Subpart RRR, Secondary Aluminum Production, because the source does not engage in activities regulated by this Subpart.

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)	60.76
Sulfur Dioxide (SO_2)	0.02
Particulate Matter (PM)	2.37
Nitrogen Oxides (NO_x)	3.07
HAP, not included in VOM or PM	-
TOTAL	66.22

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 the source 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 Section 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 report shall be submitted with the Annual Emissions Report (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 emissions from the fuel combustion equipment, the current version of AP-42 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 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit - Fuel Combustion

7.1.1 Description

The natural gas fired Kewanee boiler is used to provide hot water for building heat as well as process steam used by the other equipment. The boiler has a maximum design heat input capacity of less than 10 mmBtu/hr and was constructed in April 2000.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Kewanee Boiler (4.25 mmBtu/hr)	None

7.1.3 Applicability Provisions and Applicable Regulations

a. The “affected fuel combustion unit” for the purpose of these unit-specific conditions, is an emission unit which combusts natural gas, as described in Conditions 7.1.1 and 7.1.2.

b. The affected fuel combustion unit is subject to the emission limits identified in Condition 5.2.2.

7.1.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected fuel combustion unit not being subject to the New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, because the affected fuel combustion units has a maximum design heat input capacity of less than 2.9 MW (10 mmBtu/hr).

b. This permit is issued based on the affected fuel combustion unit not being subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the actual heat input of the unit is less than 2.9 MW (10 mmBtu/hr).

c. This permit is issued based on the affected fuel combustion unit not being subject to 35 IAC 217.141, Emissions of Nitrogen Oxides from Existing Fuel Combustion Emission Sources in Major Metropolitan

Areas, because the actual heat input of the unit is less than 73.2 MW (250 mmBtu/hr).

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

7.1.5 Control Requirements

None

7.1.6 Emission Limitations

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

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 the affected fuel combustion unit to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

a. Total natural gas usage for the affected fuel combustion units (ft^3/month and ft^3/year); and

b. Annual aggregate NO_x, PM, SO_2, and VOM emissions from each affected fuel combustion unit, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.1.10 Reporting Requirements

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

combustion unit 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 fuel combustion unit that may not have been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.

b. Emissions of NO_x, PM, SO_2, or VOM in excess of the limits specified in Condition 5.5.1 based on the current annual records, 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 opacity limit in Condition 5.2.2(b) is demonstrated under inherent operating conditions of the affected fuel combustion unit firing natural gas, so that no compliance procedures are set in this permit addressing this requirement.

b. Compliance with the emission limits in Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

Pollutant	Emission Factor ($lb/10^6 ft^3$)
PM	7.6
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), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Supplement D, March 1998.

Boiler Emissions (lb) = Natural Gas Consumed (ft^3) Multiplied by the Appropriate Emission Factor.

7.2 Unit - Solvent Cleaning (Phillips)

7.2.1 Description

The Phillips Ultrasonic Vapor Degreaser is a steam-heated open top vapor degreaser and uses n-propyl bromide to remove lubricating oils from metallic parts. The unit has a solvent capacity of 250 gallons. The unit consists of four chambers connected in series and separated by baffles. The first chamber operates as a cold cleaning unit (no vapor is present). Parts are immersed in liquid cleaning solvent for preliminary cleaning. The second, third, and fourth chambers operated with liquid and vapor. A vapor blanket approximately 10 inches thick is used and the solvent-air interface (total) is approximately 15.5 square feet. The unit is equipped with a freeboard refrigeration device.

Small metal parts are manually loaded into baskets by the operator. Baskets are manually lowered into each chamber by hoist. Once the parts are cleaned, an operator unloads the baskets. The parts are then ready for further tooling or assembly operations. Emissions of VOM are the result of solvent evaporation.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
02	Phillips Ultrasonic Vapor Degreaser and Solvent Recovery Still	None

7.2.3 Applicability Provisions and Applicable Regulations

a. The “affected Phillips degreaser” for the purpose of these unit-specific conditions, is an emission unit which cleans metallic parts without using solvents that are considered hazardous air pollutants, as described in Conditions 7.2.1 and 7.2.2.

b. The affected Phillips degreaser is subject to 35 IAC 215, Subpart E, Solvent Cleaning, which includes operating procedures, equipment requirements, and material requirements for cold cleaning and vapor degreasing operations which use volatile organic materials, because emissions of VOM may exceed 6.8 kg (15 lb) in any one day and 1.4 kg (3 lb) in any one hour.

c. The affected Phillips degreaser is subject to 35 IAC 215, Subpart G, Use of Organic Material, which provides that:

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall apply only to photochemically reactive material [35 IAC 215.301].

7.2.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected Phillips degreaser not being subject to 40 CFR Part 63, Subpart T, because the affected Phillips degreaser does not use a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent.

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

7.2.5 Operational And Production Limits And Work Practices

a. Operating Procedures - Pursuant to 35 IAC 215.182(a), no person shall operate a cold cleaning degreaser unless:

i. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20 percent of the waste solvent (by weight) is allowed to evaporate into the atmosphere;

ii. The cover of the degreaser is closed when parts are not being handled; and

iii. Parts are drained until dripping ceases.

b. Equipment Requirements - Pursuant to 35 IAC 215.182(b), no person shall operate a cold cleaning degreaser unless:

i. The degreaser is equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if:

A. The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 38°C (100°F);

B. The solvent is agitated; or

C. The solvent is heated above ambient room temperature.

ii. The degreaser is equipped with a device for draining cleaned parts. The drainage facility shall be constructed so that parts are enclosed under the cover while draining unless:

A. The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F); or

B. An internal drainage facility cannot be fitted into the cleaning system, in which case the drainage facility may be external.

iii. The degreaser is equipped with a freeboard height of 7/10 of the inside width of the tank or 91 centimeters (36 inches), whichever is less, if the vapor pressure is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point;

iv. A permanent conspicuous label summarizing the operating procedure is affixed to the affected cold cleaning unit; and

v. If a solvent spray is used, the degreaser is equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.

c. Operating Requirements - Pursuant to 35 IAC 215.183(a), no person shall operate an open top vapor degreaser unless:

i. The cover of the degreaser is closed when workloads are not being processed through the degreaser;

ii. Solvent carryout emissions are minimized by:

A. Racking parts to allow complete drainage;

B. Moving parts in and out of the degreaser at less than 3.3 meters per minute (11 feet per minute);

C. Holding the parts in the vapor zone until condensation ceases;

D. Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

E. Allowing parts to dry within the degreaser until visually dry.

iii. Porous or absorbent materials, such as cloth, leather, wood or rope are not degreased;

iv. Less than half of the degreaser's open top area is occupied with a workload;

v. The degreaser is not loaded to the point where the vapor level would drop more than 10 centimeters (4 inches) when the workload is removed from the vapor zone;

vi. Spraying is done below the vapor level only;

vii. Solvent leaks are repaired immediately;

viii. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;

ix. Water is not visually detectable in solvent exiting from the water separator; and

x. Exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area is not used, unless necessary to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.).

d. Equipment Requirements – Pursuant to 35 IAC 215.183(b), no person shall operate an open top vapor degreaser unless:

i. The degreaser is equipped with a cover designed to open and close easily without disturbing the vapor zone;

ii. The degreaser is equipped with the following switches:

A. A device which shuts off the sump heat if the amount of condenser coolant is not sufficient to maintain the designed vapor level;

B. A device which shuts off the spray pump if the vapor level drops more than 10 centimeters (4 inches) below the bottom condenser coil; and

C. A device which shuts off the sump heat source when the vapor level exceeds the design level;

iii. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and

iv. The degreaser is equipped with one of the following devices:

A. A freeboard height of 3/4 of the inside width of the degreaser tank or 91 centimeters (36 inches), whichever is less; and if the degreaser opening is greater than 1 square meter (10.8 square

feet), a powered or mechanically assisted cover; or

B. Any other equipment or system of equivalent emission control as approved by the Illinois EPA. Such equipment or system may include a refrigerated chiller, an enclosed design or a carbon adsorption system.

7.2.6 Emission Limitations

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

a. Emissions from the affected Phillips degreaser shall not exceed the following limits:

VOM Emissions	
(Ton/Month)	(Ton/Year)
3.0	35.0

These limits are based on the allowable emission rate of 8 pounds per hour (see Condition 7.2.3(c)) and maximum operating hours (8,760 hours per year).

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 00030037, 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].

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Phillips degreaser to demonstrate compliance with Conditions 5.5.1, 7.2.5, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

a. Type of solvent used;

b. Monthly and annual cleaning solvent usage (gallons);

c. Monthly and annual amount of used cleaning solvent reclaimed for reuse (gallons);

d. Monthly and annual amount of waste solvent or still bottoms sent to a disposal facility (gallons), and the percent concentration of solvent in the waste (percent by volume);

e. Density (lb/gallon) and vapor pressure at 38°C (100°F) of the cleaning solvent; and

f. Records of monthly and annual aggregate VOM emissions from the affected Phillips degreaser, based on solvent consumption and the applicable emission factors and formulas, with supporting calculations.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected Phillips degreaser 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 30 days of operation of an affected Phillips degreaser with a material which contains any combination of solvents listed in Condition 7.2.4 in a total concentration greater than 5 percent by weight.

b. Notification within 30 days of operation of an affected Phillips degreaser that may not have been

compliance with the operating requirements in Condition 7.2.5, with a copy of the records for each incident.

c. If there is an exceedance of the requirements of Conditions 7.2.6 as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, IL, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected Phillips degreaser 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. Substitution or replacement of the cleaning solvent as long as the emission units continue to comply with the requirements specified in Condition 7.2.5 and the solvent does not contain any combination of solvents listed in Condition 7.2.4 in a total concentration greater than 5 percent by weight.

7.2.12 Compliance Procedures

a. Compliance with the emission limits in Conditions 5.5.1 and 7.2.6 shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formula listed below:

VOM emissions (lb) = [(Cleaning Solvent Usage, gal) - (Waste Solvent, gal) * (Solvent Concentration in Waste Solvent, %)] * (Solvent Density, lb/gal)

7.3 Unit - Solvent Cleaning (Detrex)

7.3.1 Description

The Detrex Vapor Degreaser is a steam-heated mini-crossrod degreaser and uses trichloroethylene. The unit has a solvent capacity of 250 gallons. The unit consists of a stainless steel tank, piping, and valves. The unit is equipped with a freeboard refrigeration device. The solvent-air interface is 17 square feet.

Small metal parts are manually loaded into baskets by the operator. Baskets on a fixed conveyor system are rotated through the degreaser. The unit can accommodate up to five baskets. Once the parts are cleaned, an operator unloads the baskets. The parts are then ready for further tooling or assembly operations. Emissions of VOM and HAP are the result of solvent evaporation.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
03	Detrex Vapor Degreaser and Solvent Recovery Still	None

7.3.3 Applicability Provisions and Applicable Regulations

a. The “affected Detrex degreaser” for the purpose of these unit-specific conditions, is an emission unit which cleans metallic parts that may use solvents that are considered hazardous air pollutants, as described in Conditions 7.3.1 and 7.3.2.

b. The affected Detrex degreaser is subject to 35 IAC 215, Subpart E, Solvent Cleaning, which includes operating procedures, equipment requirements, and material requirements for cold cleaning and vapor degreasing operations which use volatile organic materials, because emissions of VOM may exceed 6.8 kg (15 lb) in any one day and 1.4 kg (3 lb) in any one hour.

c. The affected Detrex degreaser is subject to 35 IAC 215, Subpart G, Use of Organic Material, which provides that:

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall apply only to photochemically reactive material [35 IAC 215.301].

d. The affected Detrex degreaser is subject to the NESHAP for Halogenated Solvent Cleaning, 40 CFR 63 Subparts A and T, because the machine uses a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The Illinois EPA is administering these standards in Illinois on behalf of the USEPA under a delegation agreement.

7.3.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected Detrex degreaser not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected Detrex degreaser is subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.3.5 Operational And Production Limits And Work Practices

a. Operating Requirements - Pursuant to 35 IAC 215.183(a), no person shall operate an open top vapor degreaser unless:

i. The cover of the degreaser is closed when workloads are not being processed through the degreaser;

ii. Solvent carryout emissions are minimized by:

A. Racking parts to allow complete drainage;

B. Moving parts in and out of the degreaser at less than 3.3 meters per minute (11 feet per minute);

C. Holding the parts in the vapor zone until condensation ceases;

D. Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

E. Allowing parts to dry within the degreaser until visually dry.

iii. Porous or absorbent materials, such as cloth, leather, wood or rope are not degreased;

iv. Less than half of the degreaser's open top area is occupied with a workload;

v. The degreaser is not loaded to the point where the vapor level would drop more than 10 centimeters (4 inches) when the workload is removed from the vapor zone;

vi. Spraying is done below the vapor level only;

vii. Solvent leaks are repaired immediately;

viii. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;

ix. Water is not visually detectable in solvent exiting from the water separator; and

x. Exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area is not used, unless necessary to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.).

b. Equipment Requirements – Pursuant to 35 IAC 215.183(b), no person shall operate an open top vapor degreaser unless:

i. The degreaser is equipped with a cover designed to open and close easily without disturbing the vapor zone;

ii. The degreaser is equipped with the following switches:

A. A device which shuts off the sump heat if the amount of condenser coolant is not sufficient to maintain the designed vapor level;

B. A device which shuts off the spray pump if the vapor level drops more than 10 centimeters (4 inches) below the bottom condenser coil; and

C. A device which shuts off the sump heat source when the vapor level exceeds the design level;

iii. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and

iv. The degreaser is equipped with one of the following devices:

A. A freeboard height of 3/4 of the inside width of the degreaser tank or 91 centimeters (36 inches), whichever is less (note that this requirement is less stringent than the control option chosen by the Permittee in Condition 7.3.5(d)) and a powered or mechanically assisted cover; or

B. Any other equipment or system of equivalent emission control as approved by the Illinois EPA. Such equipment or system may include a refrigerated chiller, an enclosed design or a carbon adsorption system.

c. The Permittee shall ensure that each existing or new batch vapor solvent cleaning machine conforms to the design requirements specified below:

i. Each cleaning machine shall be designed or operated to meet one of the following control equipment or technique requirements:

A. An idling and downtime mode cover, as described in 40 CFR 63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine

openings when in place, and is free of cracks, holes, and other defects [40 CFR 63.463(a)(1)(i)]; or

B. A reduced room draft as described in 40 CFR 63.463(e)(2)(ii) [40 CFR 63.463(a)(1)(ii)].

ii. Each cleaning machine shall have a freeboard ratio of 0.75 or greater [40 CFR 63.463(a)(2)]. Note that this requirement is less stringent than the control option chosen by the Permittee (see Condition 7.3.5(d)).

iii. Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts [40 CFR 63.463(a)(3)].

iv. Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils [40 CFR 63.463(a)(4)].

v. Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser [40 CFR 63.463(a)(5)].

vi. Each vapor cleaning machine shall have a primary condenser [40 CFR 63.463(a)(6)].

d. The Permittee shall comply with the following control combination pursuant to 40 CFR 63.463(b)(2)(i):

i. The new batch vapor cleaning machine with a solvent/air interface area greater than 1.21 square meters (13 square feet) shall employ control combination Option 6 listed in Table 2 of 40 CFR 63.463(b).

Option 6: Freeboard Refrigeration Device, Reduced Room Draft, Freeboard Ratio of 1.0

e. The Permittee shall meet all of the following required work and operational practices specified below.

i. Control air disturbances across the cleaning machine opening(s) by incorporating the control equipment or techniques as follows:

A. Cover(s) to each solvent cleaning machine shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place [40 CFR 63.463(d)(1)(i)]; or

B. A reduced room draft as described in 40 CFR 63.463(e)(2)(ii) [40 CFR 63.463(d)(1)(ii)].

ii. The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less [40 CFR 63.463(d)(2)].

iii. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine) [40 CFR 63.463(d)(3)].

iv. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the Illinois EPA [40 CFR 63.463(d)(4)].

v. Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped [40 CFR 63.463(d)(5)].

vi. During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater [40 CFR 63.463(d)(6)].

vii. During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off [40 CFR 63.463(d)(7)].

viii. When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface [40 CFR 63.463(d)(8)].

ix. Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Illinois EPA's satisfaction to achieve the same or better results as those recommended by the manufacturer [40 CFR 63.463(d)(9)].

x. Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in appendix B of 40 CFR 63, Subpart T, if requested during an inspection by the Illinois EPA [40 CFR 63.463(d)(10)].

xi. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container [40 CFR 63.463(d)(11)].

xii. Sponges, fabric, wood, and paper products shall not be cleaned [40 CFR 63.463(d)(12)].

f. The Permittee shall comply with the following requirements for Control Option 6:

i. For a freeboard refrigeration device, the owner or operator shall ensure that the

chilled air blanket temperature (in °F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point [40 CFR 63.463(e)(2)(i)]; and

ii. For the reduced room draft the owner or operator shall:

A. Ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures in 40 CFR 63.466(d) [40 CFR 63.463(e)(2)(ii)(A)]; and

B. Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR 63.466(d) [40 CFR 63.463(e)(2)(ii)(B)].

7.3.6 Emission Limitations

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

a. Emissions from the Detrex Vapor Degreaser shall not exceed the following limits:

VOM Emissions (Ton/Month)	VOM Emissions (Ton/Year)
3.0	35.0

These limits are based on the allowable emission rate of 8 pounds per hour (see Condition 7.3.3(c)) and maximum operating hours (8,760 hours per year).

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 99080090, 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].

7.3.7 Testing Requirements

a. The Permittee shall determine the percent concentration of solvent in waste in accordance with USEPA Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW-846), Test Method 8260.

7.3.8 Monitoring Requirements

a. The Permittee shall conduct monitoring of each control device used to comply with 40 CFR 63.463 as provided in 40 CFR 63.466 [40 CFR 63.463(e)(1)].

i. For the freeboard refrigeration device, the owner or operator shall use a thermometer or thermocouple on a weekly basis to measure the temperature at the center of the air blanket during the idling mode [40 CFR 63.466(a)(1)].

ii. For the reduced room draft, the owner or operator shall measure on a quarterly basis the wind speed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the following procedures [40 CFR 63.466(d)(1)(i)]:

A. Determine the direction of the wind current by slowly rotating a velometer or similar device until maximum speed is located;

B. Orient a velometer in the direction of the wind current at each of the four corners of the machine;

C. Record the reading for each corner; and

D. Average the values obtained at each corner and record the average wind speed.

iii. For the reduced room draft, the owner or operator shall monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft [40 CFR 63.466(d)(1)(ii)].

b. The Permittee shall determine during each monitoring period whether each control device used to comply with these standards meets the requirements in Condition 7.3.5(f) (see also 40 CFR 63.463(e)(2)).

c. The Permittee complying with the equipment standards in 40 CFR 63.463 shall monitor the hoist speed as described below:

i. The Permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute) [40 CFR 63.466(c)(1)].

ii. The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the owner or operator may begin monitoring the hoist speed quarterly [40 CFR 63.466(c)(2)].

iii. If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated [40 CFR 63.466(c)(3)].

iv. If an owner or operator can demonstrate to the Illinois EPA’s satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance [40 CFR 63.466(c)(4)].

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Detrex degreaser to demonstrate

compliance with Conditions 5.5.1 and 7.3.5 through 7.3.8, pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee shall maintain the following operating records:

   i. Type of cleaning solvent used;

   ii. Monthly and annual cleaning solvent usage (gallons);

   iii. Monthly and annual amount of used cleaning solvent reclaimed for reuse (gallons);

   iv. Monthly and annual amount of waste solvent or still bottoms sent to a disposal facility (gallons), and the percent concentration of solvent in the waste (percent by volume);

   v. Density (lb/gallon) and vapor pressure at 38°C (100°F) of the cleaning solvent; and

b. Records of monthly and annual aggregate VOM and HAP emissions from the affected Detrex degreaser, based on solvent consumption and the applicable emission factors and formulas, with supporting calculations.

c. The Permittee complying with the provisions of 40 CFR 63.463 shall maintain records in written or electronic form as specified below for the lifetime of the each solvent cleaning machine:

   i. Owner's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment [40 CFR 63.467(a)(1)].

   ii. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted [40 CFR 63.467(a)(2)].

   iii. Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine [40 CFR 63.467(a)(5)].

d. The Permittee shall maintain records as specified below either in electronic or written form for a period of 5 years:

i. The results of control device monitoring required under Condition 7.3.8 (see also 40 CFR 63.466) [40 CFR 63.467(b)(1)].

ii. Information on the actions taken to comply with Conditions 7.3.5(f) and 7.3.8(a) (see also 40 CFR 63.463(e)). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels [40 CFR 63.467(b)(2)].

iii. Estimates of annual solvent consumption for each solvent cleaning machine [40 CFR 63.467(b)(3)].

7.3.10 Reporting Requirements

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

i. Notification within 30 days of operation of an affected Detrex degreaser that may not have been compliance with the operating requirements in Condition 7.3.5(a) or (b), with a copy of the records for each incident.

ii. If there is an exceedance of the requirements of Conditions 7.3.6 as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, IL, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or

violation and efforts to reduce emissions and future occurrences.

iii. If any of the requirements of Condition 7.3.5(f) (see also 40 CFR 63.463(e)(2)) are not met, the Permittee shall determine whether an exceedance has occurred using the following criteria [40 CFR 63.463(e)(3)]:

A. An exceedance has occurred if the requirements of Condition 7.3.5(f)(ii)(B) (see also 40 CFR 63.463(e)(2)(ii)(B)) have not been met.

B. An exceedance has occurred if the requirements of Condition 7.3.5(f)(i) or (f)(ii)(A) (see also 40 CFR 63.463(e)(2)(i) or (e)(2)(ii)(A)) have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits.

C. If using a control not listed in 40 CFR 63.463(e), indicate whether the exceedance of the parameters that are monitored to determine the proper functioning of this control would be classified as an immediate exceedance or whether a 15 day period would be allowed. This information must be submitted to the Illinois EPA for approval [40 CFR 63.463(f)(4)(ii)].

D. The Permittee shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in Condition 7.3.10(a)(iv) (see also 40 CFR 63.468(h)) [40 CFR 63.463(e)(4) and (f)(5)].

iv. The Permittee shall submit an exceedance report to the Illinois EPA semiannually, except when the Illinois EPA determines on a

case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or an exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under 40 CFR 63.468(i) is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the following:

A. Information on the actions taken to comply with Condition 7.3.5(f) (see also 40 CFR 63.463(e)). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels [40 CFR 63.468(h)(1)].

B. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken [40 CFR 63.468(h)(2)].

C. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report [40 CFR 63.468(h)(3)].

b. The Permittee complying with the provisions of 40 CFR 63.463 shall submit an annual report by February 1 of the year following the one for which the reporting is being made. This report shall include the requirements specified below:

i. A signed statement from the facility owner or his designee stating that, “All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR 63.463(d)(10)” [40 CFR 63.468(f)(1)].

ii. An estimate of solvent consumption for each solvent cleaning machine during the reporting period [40 CFR 63.468(f)(2)].

c. The Permittee shall notify the Illinois EPA in writing if control option other than that listed in Condition 7.3.5(d) is selected during a given monitoring period. Control options are listed in Table 2 of 40 CFR 63, Subpart T.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected Detrex degreaser 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. Substitution or replacement of the cleaning solvent as long as the emission units continue to comply with the requirements specified in Condition 7.3.5.

7.3.12 Compliance Procedures

a. Compliance with the emission limits in Conditions 5.5.1 and 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formula listed below:

VOM emissions (lb) = [(Cleaning Solvent Usage, gal) - (Waste Solvent, gal) * (Solvent Concentration in Waste Solvent, %)] * (Solvent Density, lb/gal)

b. Compliance with the operating and control requirements in Condition 7.3.5 shall be determined by the testing, monitoring, and recordkeeping required by Conditions 7.3.7, 7.3.8, and 7.3.9.

7.4 Unit - Valve Machines
Control - Oil Mist Collectors

7.4.1 Description

Aluminum valve machining is performed in enclosed units that utilize an oil mist as a lubricant. Oil mist from the units is controlled using mist controllers, which cause the mist to be recovered from the air stream, and returned to the process.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
04	6 Aluminum Valve Machines	Oil Mist Collectors

7.4.3 Applicability Provisions and Applicable Regulations

a. The “affected machining operations” for the purpose of these unit-specific conditions, are the aluminum valve machines described in Conditions 7.4.1 and 7.4.2.

b. The affected machining operations 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 3) [35 IAC 212.321(a)].

c. The affected machining operations are subject to 35 IAC 215 Subpart K, Use of Organic Material, which provides that:

i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 (see also Condition 7.4.3(b)(ii)) and the following exception: If no odor nuisance

exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material [35 IAC 215.301].

ii. Emissions of organic material in excess of those permitted by 35 IAC 215.301 (see also Condition 7.4.3(b)(i)) are allowable if such emissions are controlled by a vapor recovery system which absorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere [35 IAC 215.302(b)].

7.4.4 Non-Applicability of Regulations of Concern

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

7.4.5 Control Requirements

None

7.4.6 Emission Limitations

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

a. PM emissions from the affected machining operations shall not exceed 0.1 ton per year. This limit is based on a negligible emission rate from the exhaust system.

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). The above limitation was established in Permit 75030086 [T1].

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

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

a. Amount of lubricating oil used, based on purchase and disposal records (gallons per year);

b. Density of lubricating oil (pounds per gallon); and

c. The annual PM emissions from the affected machining operations based on the calculations procedures in Condition 7.4.12.

7.4.10 Reporting Requirements

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

a. If there is an exceedance of the requirements of Conditions 7.4.6 as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, IL, within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

a. Compliance with the emission limits in Condition 7.4.3 is assured and achieved by the work practices inherent in the affected machining operations.

b. To determine compliance with Conditions 5.5.1 and 7.4.6, emissions from the affected machining operations shall be calculated based on the recordkeeping required in Condition 7.4.9 and the following equation:

PM emissions = [Oil Purchased (gal) - Oil Disposed (gal)] * Oil Density (lb/gal) * 25% * [1 - Oil Mist Collector Efficiency (%)/100]

where the Oil Mist Collector Efficiency is as specified by the manufacturer or vender of the control device or the most recent stack test.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____**{insert public notice start date}** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

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
5415 North University
Peoria, Illinois 61614

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

Section 212.321 - Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972.

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,

i. 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

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

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

c. Limits for Process Emission Units For Which Construction of 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

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Project Summary

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.

The Harper-Wyman Company is located at 525 Elm Place in Princeton, Illinois. The source manufactures various oven and combustion components, such as heating elements, valves, and burners. The manufacturing processes include cutting, stamping, grinding, brazing, and polishing of metal and plastic. Additional activities include plastic injection molding, aluminum die casting, a groundwater remediation system, aluminum valve machining, and solvent cleaning.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Kewanee Boiler (4.25 mmBtu/hr)	April 2000	None
02	Phillips Ultrasonic Vapor Degreaser and Solvent Recovery Still	1960	None
03	Detrex Vapor Degreaser and Solvent Recovery Still	September 1999	None
04	6 Aluminum Valve Machines	4 in 1979; 2 in 1993	Oil Mist Collectors

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)	60.76
Sulfur Dioxide (SO_2)	0.02
Particulate Matter (PM)	2.37
Nitrogen Oxides (NO_x)	3.07
HAP, not included in VOM or PM	-
TOTAL	66.22

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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