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1.0 SOURCE IDENTIFICATION

1.1 Source

Senior Flexonics, Inc.  
300 East Devon Avenue  
Bartlett, Illinois 60103-4608  
630/372-3738

ID No.: 031412AAA  
Standard Industrial Classification: 3499, Fabricated Metal  
Products, Not Elsewhere  
Classified

1.2 Owner/Parent Company

Senior Engineering Group  
Senior House 59-61 High Street  
Rickmansworth, Herts, WD31RH, Great Britain

1.3 Operator

Senior Flexonics, Inc.  
Dom Bothen  
300 East Devon Avenue  
Bartlett, Illinois 60103-4608  
630/372-3732

1.4 General Source Description

Senior Flexonics, Inc. is located at 300 East Devon Avenue in Bartlett, Illinois. The source produces bellowed and convoluted metal parts used in automobiles, airplanes, instruments and medical equipment. These parts provide both physical flexibility and vibration dampening. Metal is brought to the source in sheet or coil form. The metal is then formed under pressure or welded and molded into the desired parts.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through E), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
cfm	cubic feet per minute
CFR	Code of Federal Regulations
cm	centimeter
ERMS	Emission Reduction Market System
°F	degrees Fahrenheit
ft	feet
gr	grains
hr	hour
HAP	Hazardous Air Pollutants
IAC	Illinois Administrative Code
ID No.	Identification Number of Source, assigned by Illinois EPA
in	inch
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
LAER	Lowest Achievable Emission Rate
lb	pound
m	meter
MACT	Maximum Achievable Control Technology
Mft <sup>3</sup>	Million cubic foot
Mg	Metric Tonnes or Megagrams
min	minute
mmBtu	Million British thermal units
mo	month
MSDS	Material Safety Data Sheet
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
scf	standard cubic feet

SO <sub>2</sub>	Sulfur Dioxide
T	Ton
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
TOC	Total Organic Compounds
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
Wt	Weight
yr	year

### 3.0 INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

Department 65/31 Vapor Degreaser

- 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:

Electric Drying Ovens  
Vacuum Generating Furnaces  
Brazing Stations  
Annealing Furnaces  
Natural Gas-Fired Belt Furnaces  
Natural Gas-Fired Atmosphere Furnaces  
Non-Electric Arc Welding Stations  
Natural Gas-Fired Dryers  
Saws  
Vacuum Generating Charging Units

- 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)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes,

vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

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

### 3.2 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	Detrex Open Top Vapor Degreaser (Department 55 Vapor Degreaser)	1960	Cooling Coils
04	Department 55 Pickling Line (Tanks #405 and 112)	1973	Water/Sodium Hydroxide Scrubber
05	Department 31 Pickling Line (Tanks #404 and 112)	After April 14, 1972	None
06	Department 12 West Pickling Line (Tanks #105, 106, 107, CrR1, CrR2, CrR3)	1995	None
07	Department 12 East Pickling Line (Tanks #109, 108, and N/HF)	1973	None
08	Department 55 Drying Oven	January, 1973	None
09	Cincinnati Electrical Tool Co. Abrasive Saw (Department 22 Abrasive Saw)	After April 14, 1972	Air Filter
10	Cleaver Brooks Boiler (Boiler #1)	1960	None
11	Cleaver Brooks Boiler (Boiler #2)	1960	None
12	Cleaver Brooks Boiler (Boiler #3)	1958	None
13	Cleaver Brooks Boiler (Boiler #4)	1960	None
14	Detrex Corporation Model No. VS-2000-S Open Top Vapor Degreaser (New Department 12 Vapor Degreaser)	February, 1998	Condenser

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

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

5.2 Applicable Regulations

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

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

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

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

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

5.2.3 Operating Program for Particulate Matter

- a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly

reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].
- d. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods [35 IAC 212.307].

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

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

5.2.5 Risk Management Plan

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

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
  - b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.
- 5.2.6
- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
  - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.
- 5.2.7 Episode Action Plan
- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
  - b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
  - c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
  - i. Illinois EPA, Compliance Section; and
  - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
  - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

### 5.3 Non-Applicability of Regulations of Concern

5.3.1 This permit is issued based on the Department 65/31 Vapor Degreaser no longer being subject to the NESHAP for Halogenated Solvent Cleaning, 40 CFR 63 Subparts A and T because the Department 65/31 Vapor Degreaser no longer 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. (See also Condition 5.5.3(b))

5.3.2 This permit is issued based on the source not being subject to 35 IAC 218 Subpart TT, Other Emission Units, because the process emission units not regulated by 35 IAC 218 Subpart E do not meet the applicability of 35 IAC 218.980(a) and (b). In particular, these emission units, in aggregate have:

- a. Maximum theoretical emissions of VOM are less than 90.7 Mg (100 tons) per year; and
- b. A potential to emit for VOM that is less than 22.7 Mg (25 tons) per year.

### 5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Nitrogen Oxides (NO <sub>x</sub> )	7
Particulate Matter (PM)	1
Sulfur Dioxide (SO <sub>2</sub> )	1
Volatile Organic Material (VOM)	140
HAP, not included in VOM or PM	--
TOTAL	149

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

The annual emissions from the source shall not exceed the following limitations:

- a. Emissions and operation of the new Department 12 (constructed in 1998) Vapor Degreaser shall not exceed the following limits:

<u>Material</u>	<u>Material Usage</u>		<u>Volatile Organic Material Emissions</u>	
	<u>(T/mo)</u>	<u>(T/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
Trichloroethylene	14.6	87.6	14.6	87.6

These limits are based on representations of the maximum actual emissions based on the maximum usage of trichloroethylene.

- b. The existing Department 12 Vapor Degreaser (constructed in 1960) shall permanently cease operation and the Department 65/31 Vapor Degreaser

shall no longer using solvents containing VOM or 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 prior to the initial startup of the new Department 12 Vapor Degreaser (constructed in 1998).

- c. The limits on VOM are limitations established in Permit 98020065, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. See Condition 7.7.6. [T1].
- d. The emission units with contemporaneous VOM emissions are described in Table 1 of Attachment 2. The emission units or activities used to decrease emissions are described in Table 2 of Attachment 2. The net change in VOM emissions is described in Table 3 of Attachment 2.
- e. 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).

## 5.6 General Recordkeeping Requirements

### 5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1 pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

### 5.6.2 Records for Storage Vessels

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

### 5.6.3 Retention and Availability of Records

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

## 5.7 General Reporting Requirements

### 5.7.1 General Source-Wide Reporting Requirements

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

The Permittee shall notify the Illinois EPA in writing of the actual dates of the following events within 15 days after each such event:

- a. The date that the existing Department 12 Vapor Degreaser (constructed in 1960) ceases operation;
- b. The date in which the Department 65/31 Vapor Degreaser ceases the usage of solvents containing VOM; and
- c. The date that the new Department 13 Vapor Degreaser (constructed in 1998) initially begins operation.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

N/A

## 6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)

### 6.1 Description of ERMS

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

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

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

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

### 6.2 Applicability

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

6.3 Obligation to Hold Allotment Trading Units (ATUs)

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

6.4 Market Transactions

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

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

#### 6.5 Emissions Excursion Compensation

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

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

6.6 Quantification of Seasonal VOM Emissions

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

No exceptions

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

6.7 Annual Account Reporting

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

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

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

#### 6.8 Allotment of ATUs to the Source

- a.
  - i. The allotment of ATUs to this source is 1,061 ATUs per seasonal allotment period.
  - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 106.06 tons per season.
  - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.11 of this permit.
  - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
  - v. Condition 6.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.

b. Contingent Allotments for New or Modified Emission Units

The source was not issued a construction permit prior to January 1, 1998 for the following new or modified emission units:

Emission Unit	Construction Permit No.	Date Issued
Department 12 Vapor Degreaser	98020065	9/14/98

In accordance with 35 IAC Part 205, for the above referenced emission units, the source is required to hold the appropriate amount of ATUs for these emission units.

- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:
- i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;
  - ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and
  - iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.9 Recordkeeping for ERMS

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

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

6.10 Federal Enforceability

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

6.11 Exclusions from Further Reductions

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

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

Vapor Degreaser - Dept. 12  
Vapor Degreaser - Dept. 55  
Vapor Degreaser - Dept. 65  
Boiler #1  
Boiler #2  
Boiler #4

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

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

None

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01 Department 55 Vapor Degreaser

7.1.1 Description

This vapor degreaser is used to remove oil and grease from metal and metal parts prior to further processing at the source. Trichloroethylene, which is classified as both volatile organic material (VOM) and a hazardous air pollutant (HAP), is currently used as the cleaning solvent. Emissions of VOM and HAP are the result of solvent evaporation.

This vapor degreaser was constructed in 1960. Therefore, compliance with the NESHAP for Halogenated Solvent Cleaning [40 CFR 63 Subpart T] shall be achieved no later than December 2, 1997.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Department 55 Vapor Degreaser	Cooling Coils

7.1.3 Applicability Provisions and Applicable Regulations

- a. Each vapor degreaser is an "affected degreaser" for purposes of these unit-specific conditions.
- b. The affected degreaser is subject to the NESHAP for Halogenated Solvent Cleaning, 40 CFR 63 Subparts A and T, because it 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.
- c. Pursuant to 40 CFR 63.463(a), each owner or operator of a solvent cleaning machine shall ensure that each existing or new batch vapor or in-line solvent cleaning machine conforms to the design requirements specified below:
  - i. Pursuant to 40 CFR 63.463(a)(1), each cleaning machine shall be designed or operated to meet one of the following the control equipment or technique requirements:

- A. An idling and downtime mode cover 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 [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)];
  - 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)]; and
  - vii. Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber [40 CFR 63.463(a)(7)].
- d. Pursuant to 40 CFR 63.463(b)(2)(i), the owner or operator of the existing batch vapor cleaning machine with a solvent/air interface area greater than 1.21 square meters (13 square feet) shall employ the following control combination:
    - Dwell, freeboard refrigeration device, and reduced room draft.

- e. Pursuant to 35 IAC 218.183(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 [35 IAC 218.183(b)(1)];
  - ii. The degreaser is equipped with the following switches:
    - A. One which shuts off the sump heat if the amount of condenser coolant is not sufficient to maintain the designed vapor level [35 IAC 218.183(b)(2)(A)]; and
    - B. One which shuts off the spray pump if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil [35 IAC 218.183(b)(2)(B)]; and
    - C. One which shuts off the sump heat source when the vapor level exceeds the design level [35 IAC 218.183(b)(2)(C)].
  - iii. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser [35 IAC 218.183(b)(3)]; and
  - iv. The degreaser is equipped with a freeboard height of 3/4 of the inside width of the degreaser tank or 91 cm (36 in), whichever is less; and if the degreaser opening is greater than 1 square meter (10.8 square feet), a powered or mechanically assisted cover [35 IAC 218.183(b)(4)(A)].

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

An affected degreaser using trichloroethylene as a cleaning solvent is not subject to 35 IAC 218.301, use of organic material, unless an odor nuisance exists because trichloroethylene is not a photochemically reactive material.

#### 7.1.5 Operational and Production Limits and Work Practices

- a. Pursuant to 40 CFR 63.463(d), each owner or operator of an existing or new batch vapor or in-line solvent cleaning machine shall meet all of the following required work and operational practices as applicable:

- i. Control air disturbances across the cleaning machine opening(s) by incorporating one of the following control equipment or techniques:
  - 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 [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 USEPA or 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 USEPA's or 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 USEPA or 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)]; and
  - xii. Sponges, fabric, wood, and paper products shall not be cleaned [40 CFR 63.463(d)(12)].
- b. Pursuant to 35 IAC 218.183(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 [35 IAC 218.183(a)(1)];
  - ii. Solvent carry out emissions are minimized by:
    - A. Racking parts to allow complete drainage [35 IAC 218.183(a)(2)(A)];

- B. Moving parts in and out of the degreaser at less than 3.3 m/min (11 ft/min) [35 IAC 218.183(a)(2)(B)];
  - C. Holding the parts in the vapor zone until condensation ceases [35 IAC 218.183(a)(2)(C)];
  - D. Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone [35 IAC 218.183(a)(2)(D)]; and
  - E. Allowing parts to dry within the degreaser until visually dry [35 IAC 218.183(a)(2)(E)].
- iii. Porous or absorbent materials, such as cloth, leather, wood or rope, are not degreased [35 IAC 218.183(a)(3)];
  - iv. Less than half of the degreaser's open top area is occupied with a workload [35 IAC 218.183(a)(4)];
  - v. The degreaser is not loaded to the point where the vapor level would drop more than 10 cm (4 in) when the workload is removed from the vapor zone [35 IAC 218.183(a)(5)];
  - vi. Spraying is done below the vapor level only [35 IAC 218.183(a)(6)];
  - vii. Solvent leaks are repaired immediately [35 IAC 218.183(a)(7)];
  - 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 [35 IAC 218.183(a)(8)];
  - ix. Water is not visually detectable in solvent exiting from the water separator [35 IAC 218.183(a)(9)]; 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.)  
[35 IAC 218.183(a)(10)].

#### 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

- a. Pursuant to 40 CFR 63.465(d), each owner or operator of a batch vapor or in-line solvent cleaning machine using a dwell to comply with Condition 7.1.3(d) (see also 40 CFR 63.463) shall determine the appropriate dwell time for each part or parts basket using the procedure specified below:
  - i. Determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. The part or parts basket used for this determination must be at room temperature before being placed in the vapor zone [40 CFR 63.465(d)(1)].
  - ii. The proper dwell time for parts to remain in the freeboard area above the vapor zone is no less than 35 percent of the time determined in Condition 7.1.7(b)(i) (see also 40 CFR 63.465(d)(1)) [40 CFR 63.465(d)(2)].
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the vapor pressure of the cleaning solvent, the exhaust ventilation rates, and the performance of any control devices shall be determine according to the methods specified in Condition 7.1.7(c).
- c. The following test methods shall be used to demonstrate compliance with 35 IAC 218 Subpart E:
  - i. Vapor pressures shall be determined by using the procedure specified in 35 IAC 218.110 [35 IAC 218.186(a)];
  - ii. Exhaust ventilation rates shall be determined by using the procedures specified in 35 IAC 218.105(f)(3) [35 IAC 218.186(b)]; and

- iii. The performance of control devices shall be determined by using the procedures specified in 35 IAC 218.105(f) [35 IAC 218.186(c)].

#### 7.1.8 Monitoring Requirements

- a. Pursuant to 40 CFR 63.463(e), each owner or operator of a solvent cleaning machine complying with Condition 7.1.3(d) (see also 40 CFR 63.463(b)) shall comply with the requirements specified below:

- i. Conduct monitoring of each control device used to comply with Condition 7.1.3(d) (see also 40 CFR 63.463) [40 CFR 63.463(e)(1)].

- ii. Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified below [40 CFR 63.463(e)(2)]:

- A. If a freeboard refrigeration device is used to comply with these standards, 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)].

- B. If a reduced room draft is used to comply with these standards, the owner or operator shall comply with the requirements specified below [40 CFR 63.463(e)(2)(ii)]:

- 1. 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

- 2. 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)].

C. If a dwell is used to comply with these standards, the owner or operator shall comply with the requirements specified below [40 CFR 63.463(e)(2)(v)]:

1. Determine the appropriate dwell time for each type of part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket, as described in 40 CFR 63.465(d) [40 CFR 63.463(e)(2)(v)(A)]; and
2. Ensure that, after cleaning, each part is held in the solvent cleaning machine freeboard area above the vapor zone for the dwell time determined for that particular part or parts basket, or for the maximum dwell time determined using the most complex part type or parts basket [40 CFR 63.463(e)(2)(v)(B)].

iii. Pursuant to 40 CFR 63.463(e)(3), if any of the requirements of Condition 7.1.8(a)(ii) (see also 40 CFR 63.463(e)(2)) are not met, determine whether an exceedance has occurred using the criteria listed below:

- A. An exceedance has occurred if the requirements of Conditions 7.1.8(a)(ii)(B)(2) or 7.1.8(a)(ii)(C) (see also 40 CFR 63.463(e)(2)(ii)(B) or (e)(2)(v)), have not been met [40 CFR 63.463(e)(3)(i)]; or
- B. An exceedance has occurred if the requirements of Conditions 7.1.8(a)(ii)(A), 7.1.8(a)(ii)(B)(1), or 7.1.8(a)(ii)(B)(2), (see also 40 CFR 63.463(e)(2)(i), (e)(2)(ii)(A), or (e)(2)(iii)(B)) 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  
[40 CFR 63.463(e)(3)(ii)].

- b. If a freeboard refrigeration device is used to comply with the equipment standards in Condition 7.1.3(d) (see also 40 CFR 63.463(b)(2)(i)), the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode and record the results on a weekly basis [40 CFR 63.466(a)(1)].
- c. If a dwell is used to comply with the equipment standards in Condition 7.1.3(d) (see also 40 CFR 63.463(b)(2)(i)), the owner or operator shall determine the actual dwell time by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning and record the results on a monthly basis [40 CFR 63.466(b)(2)].
- d. Pursuant to 40 CFR 63.466(d), each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment standards in Condition 7.1.3(d) (see also 40 CFR 63.463(b)(2)(i)) using a reduced room draft shall conduct monitoring and record the results as specified below:
  - i. If the reduced room draft is maintained by controlling room parameters (i.e., redirecting fans, closing doors and windows, etc.), the owner or operator shall conduct an initial monitoring test of the windspeed and of room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as specified below [40 CFR 63.466(d)(1)]:
    - A. Measure the windspeed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the procedure specified below [40 CFR 63.466(d)(1)(i)]:
      - 1. Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located [40 CFR 63.466(d)(1)(i)(A)];
      - 2. Orient a velometer in the direction of the wind current at each of the

four corners of the machine [40 CFR 63.466(d)(1)(i)(B)];

3. Record the reading for each corner [40 CFR 63.466(d)(1)(i)(C)]; and
4. Average the values obtained at each corner and record the average wind speed [40 CFR 63.466(d)(1)(i)(D)].

B. 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)].

ii. If an enclosure (full or partial) is used to achieve a reduced room draft, the owner or operator shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified below and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects [40 CFR 63.466(d)(2)]:

A. Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located [40 CFR 63.466(d)(2)(i)]; and

B. Record the maximum wind speed [40 CFR 63.466(d)(2)(ii)].

#### 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 degreaser to demonstrate compliance with Conditions 5.5.1 and 7.1.3 pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of the affected degreaser pursuant to Condition 7.1.7, which include the following [Section 39.5(7)(e) of the Act]:
  - i. The date, place and time of sampling or measurements;
  - ii. The date(s) analyses were performed;

- iii. The company or entity that performed the analyses;
  - iv. The analytical techniques or methods used;
  - v. The results of such analyses; and
  - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Pursuant to 40 CFR 63.467(a), Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Conditions 7.1.3(c) and (d) (see also 40 CFR 63.463) shall maintain records in written or electronic form specified for the lifetime of the 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. If a dwell is used to comply with these standards, records of the tests required in Condition 7.1.7(a) (see also 40 CFR 63.465(d)) to determine an appropriate dwell time for each part or parts basket [40 CFR 63.467(a)(3)]; and
  - iv. Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine subject to the provisions of 40 CFR 63 Subpart T [40 CFR 63.467(a)(5)].
- c. Pursuant to 40 CFR 63.467(b), Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with Conditions 7.1.3(c) and (d) (see also 40 CFR 63.463) shall maintain records specified below either in electronic or written form for a period of 5 years:

- i. The results of control device monitoring required under Condition 7.1.8 (see also 40 CFR 63.466) [40 CFR 63.467(b)(1)];
  - ii. Information on the actions taken to comply with Condition 7.1.8(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)]; and
  - iii. Estimates of annual solvent consumption for each solvent cleaning machine [40 CFR 63.467(b)(3)].
- d. Records of annual aggregate VOM emissions from the affected degreaser shall be maintained, based on solvent consumption and the applicable emission factors and formulas, with supporting calculations.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected 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. The owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in Condition 7.1.10(d) (see also 40 CFR 63.468(h)) [40 CFR 63.463(e)(4)].
- b. Pursuant to 40 CFR 63.468(d), each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Conditions 7.1.3(c), 7.1.3(d), and 7.1.5(a) (see also 40 CFR 63.463) shall submit to the Illinois EPA an initial statement of compliance for each solvent cleaning machine. For existing sources, this report shall be submitted to the Illinois EPA no later than May 1, 1998 (150 days after the compliance date specified in 40 CFR 63.460(d)). This report shall include the requirements specified below:
  - i. The name and address of the owner or operator [40 CFR 63.468(d)(1)];

- ii. The address (i.e., physical location) of the solvent cleaning machine(s) [40 CFR 63.468(d)(2)];
  - iii. A list of the control equipment used to achieve compliance for each solvent cleaning machine [40 CFR 63.468(d)(3)].
  - iv. For each piece of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date [40 CFR 63.468(d)(4)]; and
  - v. Conditions to maintain the wind speed requirements of Condition 7.1.8(a)(ii)(B) (see also 40 CFR 63.463(e)(2)(ii)) [40 CFR 63.468(d)(5)].
- c. Pursuant to 40 CFR 63.468(f), each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Conditions 7.1.3(c) and (d) (see also 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)" (see also Condition 7.1.5(a)(x)) [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)]; and
  - iii. The reports required under Condition 7.1.10(c) (see also 40 CFR 63.468(f)) can be combined into a single report for each facility [40 CFR 63.468(f)(3)].
- d. Pursuant to 40 CFR 63.468(h), each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Illinois EPA and the USEPA semiannually except when, the Illinois

EPA or the USEPA 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 owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under Condition 7.1.10(e) (see also 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 applicable information listed below:

- i. Information on the actions taken to comply with Condition 7.1.8(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 63.468(h)(1)]; and
  - ii. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken [40 CFR 63.468(h)(2)]; or
  - iii. 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)].
- e. Pursuant to 40 CFR 63.468(i), an owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the conditions listed below are met:
- i. The source has demonstrated a full year of compliance without an exceedance [40 CFR 63.468(i)(1)];
  - ii. The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified 40 CFR 63 Subpart A (General Provisions) and in Conditions 7.1.8 and 7.1.9 (see also 40 CFR 63.463(e)(1), 63.466, and 43.467) [40 CFR 63.468(i)(2)]; and

- iii. The Illinois EPA and the USEPA do not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of 40 CFR 63 Subpart A (General Provisions) [40 CFR 63.468(i)(3)].

7.1.11 Operational Flexibility/ Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

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

To determine compliance with Condition 5.5.1, emissions from the affected degreaser shall be calculated based on the following:

Degreaser Emissions (lb) = (Cleaning solvent VOM Consumption, lb) x [1 - (Control Device Efficiency\* (%)/100)] - (Drying Oven Emissions, lb)

\*As specified by manufacturer or vendor of air pollution control device.

7.2 Units 04 - 07 Pickling Lines  
 Control 55PLS Department 55 Pickling Line Scrubber

7.2.1 Description

Pickling lines are used to clean and remove rust and oxidization from the surface of metal and metal parts prior to further processing at the source. Pickling uses various acids such as hydrofluoric, nitric, sulfuric, and chromic acid. Fumes from the Department 55 pickling line are controlled by a wet scrubber.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
04	Department 55 Pickling Line	Scrubber
05	Department 31 Pickling Line	None
06	Department 12 West Pickling Line	None
07	Department 12 East Pickling Line	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. Each pickling line is an "affected pickling line" for purposes of these unit-specific conditions.
- b. Each affected pickling line is subject to the emission limits identified in Condition 5.2.2.
- c. The affected pickling lines at the source are subject to 35 IAC 212.321, which provides that:
  - i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See Attachment 1) [35 IAC 212.321(a)].
  - ii. Because the process weight rate for each affected pickling lines is less than 100 pounds per hour, the allowable PM emission rate, from each affected pickling line, set by 35 IAC 212.321 is 0.55 pounds per hour.

- b. No person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfuric trioxide from all other similar emission source at a plant or premises to exceed 45.4 grams in any one hour period for sulfuric acid usage less than 1180 Mg/yr (100 percent acid basis) (0.10 lb/hr up to 1300 tons/yr) [35 IAC 214.303(a)].

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected pickling lines at this source are not subject to 35 IAC 217.301(a) and (b), emissions of Nitrogen Oxides From Industrial Processes, pursuant to 35 IAC 217.301(c) which exempts any industrial process using less than 90.7 Mg (100 tons) of nitric acid (100 percent acid basis) annually or which produces less than 907 kg (1 ton) of nitrogen oxides (expressed as nitrogen dioxide) per year.
- b. The affected pickling lines are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

7.2.5 Operational and Production Limits and Work Practices

- a. The Department 55 Pickling Line, the Department 31 Pickling Line, and the Department 12 East Pickling Line shall only use nitric or hydrofluoric acids.
- b. The Department 12 West Pickling Line shall only use sulfuric or chromic acids.
- c. The Permittee shall follow good operating practices for the scrubber, including periodic inspection, routine maintenance and prompt repair of defects.

7.2.6 Emission Limitations

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

7.2.7 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 each affected pickling line to demonstrate compliance with Conditions 5.5.1, 7.2.3, and 7.2.5 pursuant to Section 39.5(7)(b) of the Act:

- a. Records addressing use of good operating practices for the scrubber:
  - i. Records for periodic inspection of the scrubber with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- b. The operating schedule of the pickling lines;
- c. Records of annual aggregate NO<sub>x</sub> emissions from the Department 55 Pickling Line, the Department 31 Pickling Line, and the Department 12 East Pickling Line shall be maintained, based on materials consumption and the applicable emission factors, formulas, and test procedures, with supporting calculations; and
- d. Records of annual aggregate sulfuric acid emissions from the Department 12 West Pickling Line shall be maintained, based on materials consumption and the applicable emission factors, formulas, and test procedures, with supporting calculations; and

#### 7.2.10 Reporting Requirements

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

- a. Emissions of sulfuric acid from the Department 12 West Pickling line in excess of 45.4 grams in any one hour period (0.10 lb/hr) within 30 days of such an occurrence;

- b. Use of 1180 Mg/yr (1300 tons/yr) or more of sulfuric acid (100 percent acid basis) on the Department 12 West Pickling line based on purchase records within 60 days of such an occurrence;
- c. Use of 90.7 Mg/yr (100 tons/yr) or more of nitric acid (100 percent acid basis) or emissions of 907 kg/yr (1 ton/yr) or more of nitrogen oxides (expressed as nitrogen dioxide) from the Department 55 Pickling Line, the Department 31 Pickling Line, or the Department 12 East Pickling Line based on purchase records within 60 days of such an occurrence; and
- d. Continued operation of the Department 55 Pickling line with a defect in the scrubber that may result in the following:
  - i. Emissions of particulate matter in excess of the allowable limit specified in Condition 7.2.3; and/or
  - ii. Emissions of nitrogen oxides of 1 ton/yr or more.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

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

- a. Compliance with Condition 7.2.3 is assured by proper operation of the scrubber, as addressed by Condition 7.2.5.
- b. To determine compliance with Conditions 5.5.1, 7.2.3(d) emissions from the pickling lines shall be calculated based on the following:
  - i. Sulfuric Acid Emissions:
 
$$\text{Sulfuric Acid Emissions} = \text{Sulfuric Acid Consumption}$$
  - ii. Nitrogen Oxide Emissions:
 
$$\text{NO}_x \text{ Emissions (lb)} = (\text{Wt of Nitric Acid Consumed, lb}) \times (5/7)$$

7.3 Unit 08 Department 55 Drying Oven

7.3.1 Description

The drying oven is used to dry metal and metal parts removed from the Department 55 Vapor Degreaser. The drying ovens remove remaining solvent prior to further processing at the source. Trichloroethylene, which is both a volatile organic material (VOM) and a hazardous air pollutant (HAP), is currently used as the cleaning solvent. Emissions of VOM and HAPs are the result of solvent evaporation.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
08	Department 55 Drying Oven	None

7.3.3 Applicability Provisions and Applicable Regulations

The drying oven is an "affected drying oven" for purposes of these unit-specific conditions.

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected drying oven is not subject to 35 IAC 218.301, use of organic material, which applies only to photochemically reactive material unless an odor nuisance exists. Emissions of VOM are a result of drying of items cleaned with trichloroethylene, which is not a photochemically reactive material.
- b. The affected drying oven is not subject to the control requirements of 35 IAC 218 Subpart TT, other emission units, because the process emission units not regulated by 35 IAC 218 Subpart E meet the following criteria pursuant to 35 IAC 218.980(a) and (b):
  - i. Have maximum theoretical emissions of less than 90.7 Mg (100 tons) per calendar year of VOM; and
  - ii. Have the potential to emit less than 22.7 Mg (25 tons) of VOM per year in aggregate.

7.3.5 Operational and Production Limits and Work Practices

The affected drying oven shall only be operated with electricity as a source of heat.

7.3.6 Emission Limitations

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

Emissions of VOM from the affected drying oven shall not exceed 24.9 tons per year. As a result, this process emission unit is not subject to the control requirements of 35 IAC 218 Subpart TT, Other Emission Units.

7.3.7 Testing Requirements

Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the VOM emissions of the affected drying oven shall be determined according to USEPA Reference Methods 25 and/or 25A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a).

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

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

- a. Records of the testing of the affected drying oven pursuant to Condition 7.3.7, which include the following [Section 39.5(7)(e) of the Act]:
  - i. The date, place and time of sampling or measurements;
  - ii. The date(s) analyses were performed;
  - iii. The company or entity that performed the analyses;
  - iv. The analytical techniques or methods used;
  - v. The results of such analyses; and
  - vi. The operating conditions as existing at the time of sampling or measurement.

- b. The operating schedule of the affected drying oven;  
and
- c. Records of annual VOM emissions from the affected drying oven shall be maintained, the typical hourly emission rate and the operating schedule with supporting calculations.

#### 7.3.10 Reporting Requirements

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

Upon request by the Illinois EPA, the Permittee shall submit records of an emission unit which is exempt from the requirements of 35 IAC 218 Subpart TT within 30 days from the date of the request that document that the emission unit is exempt from those requirements [35 IAC 218.990].

#### 7.3.11 Operational Flexibility/ Anticipated Operating Scenarios

N/A

#### 7.3.12 Compliance Procedures

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

- a. The emission of VOM from the affected shall be determined based an hourly emission rate of 5.21 lb/hr, which is the emission rate determined in the most recent compliance test.
- b. For the purpose of determining emissions for fee purposes, pursuant to Condition 5.5.1, the emissions from the affected drying oven shall be subtracted from the emissions from the vapor degreasers, so as to not double-count emissions at the source.
- c. To determine compliance with Condition 5.5.1 emissions from the affected drying oven shall be calculated based on the following:

Drying Oven Emissions (lb) = (5.21 lb/hr) x (Operating Time, hr)

7.4 Unit 09 Department 22 Abrasive Saw  
Control ASAF Abrasive Saw Air Filter

7.4.1 Description

An abrasive saw is used to cut metal pieces prior to further processing at the source. The abrasive saw is exhausted through an air filter, which collects the dust generated during cutting. The abrasive saw is a new process emission unit because its construction or modification commenced on or after April 14, 1972.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
09	Department 22 Abrasive Saw	Abrasive Saw Air Filter

7.4.3 Applicability Provisions and Applicable Regulations

- a. The abrasive saw is an "affected saw" for purposes of these unit-specific conditions.
- b. The affected saw is subject to the emission limits identified in Condition 5.2.2.
- c. The affected saw is subject to 35 IAC 212.321(a), which provides that:
  - i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See Attachment 1) [35 IAC 212.321(a)].
  - ii. Because the process weight rate for the affected saw is less than 100 pounds per hour, the allowable PM emission rate set by 35 IAC 212.321 is 0.55 pounds per hour.

7.4.4 Non-Applicability of Regulations of Concern

The affected saw is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not

located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

7.4.5 Operational and Production Limits and Work Practices

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

7.4.6 Emission Limitations

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

- a. This permit is issued based on negligible emissions of particulate matter from the affected saw. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr.
- b. The above limitations were established in Permit 90080092, 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].
- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.4.7 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 saw to demonstrate compliance with Conditions 5.5.1, 7.4.3, 7.4.5 and 7.4.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Records addressing use of good operating practices for the air filter:
  - i. Records for periodic inspection of the air filter with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- b. The operating schedule of the affected saw; and
- c. The annual PM emissions from the affected saw based on the operating schedule and the typical hourly emission rate, with supporting calculations.

#### 7.4.10 Reporting Requirements

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

Continued operation of the affected saw with a defect in the air filter that may result in emissions of particulate matter in excess of limits in Condition 7.4.6 within 30 days of such an occurrence.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.4.12 Compliance Procedures

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

- a. Compliance with Condition 7.4.3 is assured by proper operation of the air filter, as addressed by Condition 7.4.5.
- b. To determine compliance with Conditions 5.5.1, 7.4.3, and 7.4.6, emissions from the abrasive saw shall be calculated based on the following:

PM Emissions (lb) (Air Flow, cfm) x (Estimated Dust Loading\*, gr/scf) x (1 lb/7,000 gr) x (60 minutes/hr) x [1 - (Air Filter Efficiency\* (%)/100)]

\*As specified by manufacturer or vendor of air filter

7.5 Units 10 - 11, 13 Boilers #1 - 2, #4

7.5.1 Description

Boilers are used to provide steam for comfort heating within the source. These boilers combust natural gas exclusively, with firing rates that exceed 10 mmBtu/hr, but are less than 100 mmBtu/hr.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Rated Heat Input
10	Boiler #1	20.9 mmBtu/hr
11	Boiler #2	20.9 mmBtu/hr
13	Boiler #4	10.5 mmBtu/hr

7.5.3 Applicability Provisions and Applicable Regulations

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

7.5.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, modified, or reconstructed after June 9, 1989. The affected boilers were constructed in 1960, therefore, these rules do not apply.
- b. The affected boilers are not 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 each of these affected boilers is less than 73.2 MW (250 mmBtu/hr).
- c. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, Use Of Organic Material.

7.5.5 Operational and Production Limits and Work Practices

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

7.5.6 Emission Limitations

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

7.5.7 Testing Requirements

None

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

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

- a. Records of the fuel usage for the affected boilers combined, Mft<sup>3</sup>/mo and Mft<sup>3</sup>/year; and
- b. Records of the monthly and annual aggregate NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the affected boilers shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.5.10 Reporting Requirements

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

N/A

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

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

- a. Compliance with Condition 7.5.3(c) is assumed by the work-practices inherent in operation of natural gas-fired boilers, so that no compliance procedures are set in this permit addressing this regulation.
- b. To determine compliance with Condition 5.5.1, emissions from the affected boilers shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/Mft<sup>3</sup>)</u>
NO <sub>x</sub>	140
PM	14
SO <sub>2</sub>	0.6
VOM	2.8

These are the emission factors for uncontrolled natural gas combustion in small industrial boilers (10 - < 100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Fifth Edition, October, 1996. VOM emission factor based on TOC factor corrected for 52% methane contribution.

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

7.6 Unit 12 Boiler #3

7.6.1 Description

Boilers are used to provide steam for comfort heating within the source. This boiler combusts natural gas exclusively, with a firing rate that exceeds 0.3 mmBtu/hr, but is less than 10 mmBtu/hr.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Rated Heat Input
12	Boiler #3	2.5 mmBtu/hr

7.6.3 Applicability Provisions and Applicable Regulations

- a. Boiler #3 is an "affected boiler" for purposes of these unit-specific conditions.
- b. The affected boiler is subject to the emission limits identified in Condition 5.2.2.

7.6.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applied to units constructed, modified, or reconstructed after June 9, 1989. The affected boiler was constructed in 1960 and has a maximum design heat input capacity of less than 2.9 MW (10 mmBtu/hr), therefore, this regulation does not apply.
- b. The affected boiler is not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the actual heat input is less than 2.9 MW (10 mmBtu/hr).
- c. The affected boiler is not 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 this boiler is less than 73.2 MW (250 mmBtu/hr).
- d. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, use of organic material.

7.6.5 Operational and Production Limits and Work Practices

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

7.6.6 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.

7.6.7 Testing Requirements

None

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

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

- a. Records of the fuel usage for the affected boiler, Mft<sup>3</sup>/mo and Mft<sup>3</sup>/year; and
- b. Records of the monthly and annual aggregate NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the affected boiler shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.6.10 Reporting Requirements

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

N/A

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

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

To determine compliance with Condition 5.5.1, emissions from the affected boiler shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/Mft<sup>3</sup>)</u>
NO <sub>x</sub>	100
PM	11.9
SO <sub>2</sub>	0.6
VOM	2.8

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (0.3 - < 10 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Fifth Edition, October, 1996. VOM emission factor based on TOC factor corrected for 52% methane contribution.

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

7.7 Unit 14 New Department 12 Vapor Degreaser  
Control 14 Condenser

7.7.1 Description

This vapor degreaser is used to remove oil and grease from metal and metal parts prior to further processing at the source. Trichloroethylene, which is classified as both volatile organic material (VOM) and a hazardous air pollutant (HAP), is currently used as the cleaning solvent. Emissions of VOM and HAP are the result of solvent evaporation.

This vapor degreaser replaces a similar unit which was constructed in 1960 (existing Department 12 Vapor Degreaser). Compliance with the NESHAP for Halogenated Solvent Cleaning [40 CFR 63 Subpart T] shall be achieved upon startup.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
14	Detrex Corporation Model No. VS-2000-S Open Top Vapor Degreaser (New Department 12 Vapor Degreaser)	Condenser

7.7.3 Applicability Provisions and Applicable Regulations

- a. The New Department 12 Vapor Degreaser is an "affected degreaser" for purposes of these unit-specific conditions.
- b. The affected degreaser is subject to the NESHAP for Halogenated Solvent Cleaning, 40 CFR 63 Subparts A and T, because it 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.
- c. Pursuant to 40 CFR 63.463(a), each owner or operator of a solvent cleaning machine shall ensure that each new batch vapor solvent cleaning machine conforms to the design requirements specified below:
  - i. Pursuant to 40 CFR 63.463(a)(1), each cleaning machine shall be designed or operated to meet

one of the following the control equipment or technique requirements:

- A. An idling and downtime mode cover 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 [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)];
  - 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)]; and
  - vii. Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber [40 CFR 63.463(a)(7)].
- d. Pursuant to 40 CFR 63.463(b)(2)(i), the owner or operator of the new batch vapor cleaning machine with a solvent/air interface area greater than 1.21 square meters (13 square feet) shall employ the following control combination:

Freeboard refrigeration device, freeboard ratio of 1.0, superheated vapor.

- e. Pursuant to 35 IAC 218.183(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 [35 IAC 218.183(b)(1)];
  - ii. The degreaser is equipped with the following switches:
    - A. One which shuts off the sump heat if the amount of condenser coolant is not sufficient to maintain the designed vapor level [35 IAC 218.183(b)(2)(A)]; and
    - B. One which shuts off the spray pump if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil [35 IAC 218.183(b)(2)(B)]; and
    - C. One which shuts off the sump heat source when the vapor level exceeds the design level [35 IAC 218.183(b)(2)(C)].
  - iii. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser [35 IAC 218.183(b)(3)]; and
  - iv. The degreaser is equipped with a freeboard height of 3/4 of the inside width of the degreaser tank or 91 cm (36 in), whichever is less; and if the degreaser opening is greater than 1 square meter (10.8 square feet), a powered or mechanically assisted cover [35 IAC 218.183(b)(4)(A)].

#### 7.7.4 Non-Applicability of Regulations of Concern

An affected degreaser using trichloroethylene as a cleaning solvent is not subject to 35 IAC 218.301, use of organic material, unless an odor nuisance exists because trichloroethylene is not a photochemically reactive material.

7.7.5 Operational and Production Limits and Work Practices

- a. Pursuant to 40 CFR 63.463(d), each owner or operator of a new batch vapor solvent cleaning machine shall meet all of the following required work and operational practices as applicable:
  - i. Control air disturbances across the cleaning machine opening(s) by incorporating one of the following control equipment or techniques:
    - 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 [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 USEPA or 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 USEPA's or 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 USEPA or 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)]; and
  - xii. Sponges, fabric, wood, and paper products shall not be cleaned [40 CFR 63.463(d)(12)].
- b. Pursuant to 35 IAC 218.183(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 [35 IAC 218.183(a)(1)];

- ii. Solvent carry out emissions are minimized by:
  - A. Racking parts to allow complete drainage [35 IAC 218.183(a)(2)(A)];
  - B. Moving parts in and out of the degreaser at less than 3.3 m/min (11 ft/min) [35 IAC 218.183(a)(2)(B)];
  - C. Holding the parts in the vapor zone until condensation ceases [35 IAC 218.183(a)(2)(C)];
  - D. Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone [35 IAC 218.183(a)(2)(D)]; and
  - E. Allowing parts to dry within the degreaser until visually dry [35 IAC 218.183(a)(2)(E)].
- iii. Porous or absorbent materials, such as cloth, leather, wood or rope, are not degreased [35 IAC 218.183(a)(3)];
- iv. Less than half of the degreaser's open top area is occupied with a workload [35 IAC 218.183(a)(4)];
- v. The degreaser is not loaded to the point where the vapor level would drop more than 10 cm (4 in) when the workload is removed from the vapor zone [35 IAC 218.183(a)(5)];
- vi. Spraying is done below the vapor level only [35 IAC 218.183(a)(6)];
- vii. Solvent leaks are repaired immediately [35 IAC 218.183(a)(7)];
- 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 [35 IAC 218.183(a)(8)];
- ix. Water is not visually detectable in solvent exiting from the water separator [35 IAC 218.183(a)(9)]; 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.) [35 IAC 218.183(a)(10)].

7.7.6 Emission Limitations

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

- a. Emissions and operation of the New Department 12 Vapor Degreaser shall not exceed the following limits:

<u>Material</u>	<u>Material Usage</u>		<u>Volatile Organic Material Emissions</u>	
	<u>(T/mo)</u>	<u>(T/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
Trichloroethylene	14.6	87.6	14.6	87.6

These limits are based on representations of the maximum actual emissions based on the maximum usage of trichloroethylene.

- b. The existing Department 12 Vapor Degreaser (constructed in 1960) shall permanently cease operation and the Department 65/31 Vapor Degreaser shall no longer using solvents containing VOM or 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 prior to the initial startup of the New Department 12 Vapor Degreaser.
- c. The above limitations were established in Permit 98020065, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].
- d. The emission units with contemporaneous VOM emissions are described in Table 1 of Attachment 2. The emission units or activities used to decrease emissions are described in Table 2 of Attachment 2.

The net change in VOM emissions is described in Table 3 of Attachment 2.

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

#### 7.7.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the vapor pressure of the cleaning solvent, the exhaust ventilation rates, and the performance of any control devices shall be determine according to the methods specified in Condition 7.7.7(b).
- b. The following test methods shall be used to demonstrate compliance with 35 IAC 218 Subpart E:
  - i. Vapor pressures shall be determined by using the procedure specified in 35 IAC 218.110 [35 IAC 218.186(a)];
  - ii. Exhaust ventilation rates shall be determined by using the procedures specified in 35 IAC 218.105(f)(3) [35 IAC 218.186(b)]; and
  - iii. The performance of control devices shall be determined by using the procedures specified in 35 IAC 218.105(f) [35 IAC 218.186(c)].
- c. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall ensure and obtain certification from the manufacturer that the freeboard height is greater than or equal to the width of the interior freeboard. Freeboard ratio shall be determined by dividing the height of freeboard to the smallest interior freeboard width. If the freeboard ratio is less than 1.0, the permittee shall immediately correct the freeboard ratio.

#### 7.7.8 Monitoring Requirements

- a. Pursuant to 40 CFR 63.463(e), each owner or operator of a solvent cleaning machine complying with Condition 7.7.3(d) (see also 40 CFR 63.463(b)) shall comply with the requirements specified in Conditions 7.7.8(a)(i) through (a)(iv) (see also 40 CFR 63.463(e)(1) through (e)(4)) as follows:

- i. Conduct monitoring of each control device used to comply with Conditions 7.7.3(c) and (d) and 7.7.5(a) (see also 40 CFR 63.463) as provided in Condition 7.7.8(b) through (d) (see also 40 CFR 63.466) [40 CFR 63.463(e)(1)].
- ii. Pursuant to 40 CFR 63.463(e)(2), determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in Conditions 7.7.8(a)(ii)(A) through (a)(ii)(D) (see also 40 CFR 63.463(e)(2)(i) through (e)(2)(vii)) as follows:
  - A. If a freeboard refrigeration device is used to comply with these standards, 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)].
  - B. Pursuant to 40 CFR 63.463(e)(2)(ii), if a reduced room draft is used to comply with these standards, the owner or operator shall comply with the requirements specified in Conditions 7.7.8(a)(ii)(B)(1) and (a)(ii)(B)(2) (see also 40 CFR 63.463(e)(2)(ii)(A) and (e)(2)(ii)(B)) as follows:
    1. 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 Condition 7.7.8(d) (see also 40 CFR 63.466(d)) [40 CFR 63.463(e)(2)(ii)(A)].
    2. 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 Condition 7.7.8(d) (see also 40 CFR 63.466(d)) [40 CFR 63.463(e)(2)(ii)(B)].

C. Pursuant to 40 CFR 63.463(a)(2)(iv), if an idling-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in Conditions 7.7.8(a)(ii)(C)(1) and (a)(ii)(C)(2) (see also 40 CFR 63.463(e)(2)(iv)(A) and (e)(2)(iv)(B)) as follows:

1. Ensure that the cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place [40 CFR 63.463(e)(2)(iv)(A)].
2. Ensure that the idling-mode cover is maintained free of cracks, holes, and other defects [40 CFR 63.463(e)(2)(iv)(B)].

D. Pursuant to 40 CFR 63.463(a)(2)(vi), if a superheated vapor system is used to comply with these standards, the owner or operator shall comply with the requirements specified in Conditions 7.7.8(a)(ii)(D)(1) through (a)(ii)(D)(3) (see also 40 CFR 63.463(e)(2)(vi)(A) through (e)(2)(vi)(C)) as follows:

1. Ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10°F above the solvent's boiling point [40 CFR 63.463(e)(2)(vi)(A)].
2. Ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed [40 CFR 63.463(e)(2)(vi)(B)].
3. Ensure that parts remain within the superheated vapor for at least the minimum proper dwell time [40 CFR 63.463(e)(2)(vi)(C)].

iii. Pursuant to 40 CFR 63.463(e)(3), if any of the requirements of Condition 7.7.8(a)(ii) (see also 40 CFR 63.463(e)(2)) are not met,

determine whether an exceedance has occurred using the criteria in Conditions 7.7.8(a)(iii)(A) and (a)(iii)(B) (see also 40 CFR 63.463(e)(3)(i) and (e)(3)(ii)) as follows:

- A. An exceedance has occurred if the requirements of Conditions 7.7.8(a)(ii)(B)(2), (a)(ii)(C)(1), or (a)(ii)(D)(3) (see also 40 CFR 63.463(e)(2)(ii)(B), (e)(2)(iv)(A), (e)(2)(vi)(B), or (e)(2)(vi)(C)) have not been met [40 CFR 63.463(e)(3)(i)].
  - B. An exceedance has occurred if the requirements of Conditions 7.7.7(a)(ii)(A), (a)(ii)(B)(1), (a)(ii)(C)(2), or (a)(ii)(D)(1) (see also 40 CFR 63.463(e)(2)(i), (e)(2)(ii)(A), (e)(2)(iv)(B), or (e)(2)(vi)(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 [40 CFR 63.463(e)(3)(ii)].
- b. Pursuant to 40 CFR 63.466(a), except as provided in 40 CFR 63.466(g), each owner or operator of a batch vapor solvent cleaning machine complying with the equipment standards in Condition 7.7.3(d) (see also 40 CFR 63.463(b)(2)(i)) shall conduct monitoring and record the results on a weekly basis for the control devices, as appropriate, specified in Conditions 7.7.8(b)(i) and (a)(ii) (see also 40 CFR 63.466(a)(1) and (a)(2)) as follows:
- i. If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode [40 CFR 63.466(a)(1)]; and
  - ii. If a superheated vapor system is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone

while the solvent cleaning machine is in the idling mode [40 CFR 63.466(a)(2)].

- c. Pursuant to 40 CFR 63.466(c), except as provided in paragraph 40 CFR 63.466(g), each owner or operator of a batch vapor solvent cleaning machine complying with the equipment or idling standards in Condition 7.7.3(c) (see also 40 CFR 63.463) shall monitor the hoist speed as described in Conditions 7.7.8(c)(i) through (c)(iv) (see also 40 CFR 63.466(c)(1) through (c)(4)) as follows:
- i. The owner or operator 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 and/or USEPA'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)].
- d. Pursuant to 40 CFR 63.466(d), except as provided in 40 CFR 63.466(g), each owner or operator of a batch vapor solvent cleaning machine complying with the equipment standards in Condition 7.7.3(c)(i)(B) (see also 40 CFR 63.463(a)(1)(ii)) using a reduced room draft shall conduct monitoring and record the results as specified in Condition 7.7.8(d)(i) or (d)(ii) (see also 40 CFR 63.466(d)(1) or (d)(2)) as follows:
- i. Pursuant to 40 CFR 63.466(d)(1), if the reduced room draft is maintained by

controlling room parameters (i.e., redirecting fans, closing doors and windows, etc.), the owner or operator shall conduct an initial monitoring test of the windspeed and of room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as specified in Conditions 7.7.8(d)(i)(A) and (d)(i)(B) (see also 40 CFR 63.466(d)(1)(i) and (d)(1)(ii)) as follows:

- A. Pursuant to 40 CFR 63.466(d)(1)(i), measure the windspeed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the procedure specified in Conditions 7.7.8(d)(i)(A)(1) through (d)(i)(A)(4) (see also 40 CFR 63.466(d)(1)(i)(A) through (d)(1)(i)(D)) as follows:
    - 1. Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located [40 CFR 63.466(d)(1)(i)(A)].
    - 2. Orient a velometer in the direction of the wind current at each of the four corners of the machine [40 CFR 63.466(d)(1)(i)(B)].
    - 3. Record the reading for each corner [40 CFR 63.466(d)(1)(i)(C)].
    - 4. Average the values obtained at each corner and record the average wind speed [40 CFR 63.466(d)(1)(i)(D)].
  - B. 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)].
- ii. Pursuant to 40 CFR 63.466(d)(2), if an enclosure (full or partial) is used to achieve a reduced room draft, the owner or operator shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified in Conditions 7.7.8(d)(ii)(A) and (d)(ii)(B) (see also 40

CFR 63.466(d)(2)(i) and (d)(2)(ii)) and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects as follows:

- A. Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located [40 CFR 63.466(d)(2)(i)].
- B. Record the maximum wind speed [40 CFR 63.466(d)(2)(ii)].

#### 7.7.9 Recordkeeping Requirements

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

- a. Records of the testing of the affected degreaser pursuant to Condition 7.7.7, which include the following [Section 39.5(7)(e) of the Act]:
  - i. The date, place and time of sampling or measurements;
  - ii. The date(s) analyses were performed;
  - iii. The company or entity that performed the analyses;
  - iv. The analytical techniques or methods used;
  - v. The results of such analyses; and
  - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Pursuant to 40 CFR 63.467(a), Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Conditions 7.7.3(c) and (d) and 7.7.5(a) (see also 40 CFR 63.463) shall maintain records in written or electronic form specified in Conditions 7.7.9(b)(i) through (iii) (see also 40 CFR 63.467(a)(1) through (a)(5)) for the lifetime of the machine as follows:

- 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 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 subject to the provisions of 40 CFR 63 Subpart T [40 CFR 63.467(a)(5)]
- c. Pursuant to 40 CFR 63.467(b), each owner or operator of a batch vapor solvent cleaning machine complying with Conditions 7.7.3(c) and (d) and 7.7.5(a) (see also 40 CFR 63.463) shall maintain records specified in Conditions 7.7.9(c)(i) through (iii) (see also 40 CFR 63.467(b)(1) through (b)(4)) either in electronic or written form for a period of 5 years as follows:
- i. The results of control device monitoring required under Condition 7.7.8 (see also 40 CFR 63.466) [40 CFR 63.467(b)(1)].
    - A. The Permittee shall keep weekly records of the freeboard air temperature measurements.
    - B. The Permittee shall keep weekly records of the room condition and windspeed, if complying with Condition 7.7.3(c)(i) (see also 40 CFR 63.463(a)(1)) through the use of a reduced room draft.
    - C. The Permittee shall keep monthly records of the enclosure inspection results and windspeed measurement, if complying with Condition 7.7.3(c)(i) (see also 40 CFR 63.463(a)(1)) through the use of a reduced room draft.
    - D. The Permittee shall keep a record of the freeboard ratio and any modification to the freeboard ratio.

- E. The Permittee shall keep weekly records of the temperature measurement of the superheated vapor.
- ii. Information on the actions taken to comply with Condition 7.7.8(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)].
- d. Trichloroethylene usage in the New Department 12 Vapor Degreaser, Ton/mo and Ton/yr;
- e. Waste solvent removed from the New Department 12 Vapor Degreaser and sent off-site for reclamation or disposal, as determined by monthly manifests, gal/mo and gal/yr;
- f. Percent concentration of solvent in waste, as determined by analysis/testing, percent by weight; and
- g. Records of monthly and annual aggregate VOM emissions from the affected degreaser shall be maintained, based on solvent consumption and the applicable emission factors and formulas, with supporting calculations.

#### 7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected 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. The owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in Condition 7.7.10(d) (see also 40 CFR 63.468(h)) [40 CFR 63.463(e)(4)].
- b. Pursuant to 40 CFR 63.468(d), each owner or operator of a batch vapor solvent cleaning machine complying with the provisions of Conditions 7.7.3(c) and (d) and

7.7.5(a) (see also 40 CFR 63.463) shall submit to the Illinois EPA and/or USEPA an initial statement of compliance for each solvent cleaning machine. For new sources, this report shall be submitted to the Illinois EPA and/or USEPA no later than 150 days after startup or May 1, 1995, whichever is later. This statement shall include the requirements specified in Condition 7.7.10(b)(i) through (b)(vi) (see also 40 CFR 63.468(d)(1) through (d)(4)) as follows:

- i. The name and address of the owner or operator [40 CFR 63.468(d)(1)].
  - ii. The address (i.e., physical location) of the solvent cleaning machine(s) [40 CFR 63.468(d)(2)].
  - iii. A list of the control equipment used to achieve compliance for each solvent cleaning machine [40 CFR 63.468(d)(3)].
  - iv. For each piece of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date [40 CFR 63.468(d)(4)].
- c. Pursuant to 40 CFR 63.468(f), each owner or operator of a batch vapor solvent cleaning machine complying with the provisions of Conditions 7.7.3(c) and (d) and 7.7.5(a) (see also 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 in Conditions 7.7.10(c)(i) through (c)(iii) (see also 40 CFR 63.468(f)(1) through (f)(3)) as follows:
- 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)" (see also Condition 7.7.5(a)(x)) [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)].

- iii. The reports required under Condition 7.7.10(c) (see also 40 CFR 63.468(f)) can be combined into a single report for each facility [40 CFR 63.468(f)(3)].
- d. Pursuant to 40 CFR 63.463(h), each owner or operator of a batch vapor solvent cleaning machine shall submit an exceedance report to the Illinois EPA and/or USEPA semiannually except when, the Illinois EPA and/or USEPA determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under Condition 7.7.10(e) (see also 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 applicable information in Conditions 7.7.10(d)(i) through (iii) (see also 40 CFR 63.468(h)(1) through (3)) as follows:
  - i. Information on the actions taken to comply with Condition 7.7.7(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 63.468(h)(1)].
  - ii. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken [40 CFR 63.468(h)(2)].
  - iii. 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)].
- e. Pursuant to 40 CFR 63.468(i), an owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the conditions in Conditions 7.7.10(e)(i) through (iii) (see also 40 CFR 63.468(i)(1) through (i)(3)) are met as follows:

- i. The source has demonstrated a full year of compliance without an exceedance [40 CFR 63.468(i)(1)].
  - ii. The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified 40 CFR 63 Subpart A (General Provisions) and in Conditions 7.7.8 and 7.7.9 (see also 40 CFR 63 Subpart T) [40 CFR 63.468(i)(2)].
  - iii. The Illinois EPA and/or USEPA does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of 40 CFR 63 Subpart A (General Provisions) [40 CFR 63.468(i)(3)].
- f. The Permittee shall notify the Illinois EPA in writing of the actual dates of the following events within 15 days after each such event:
- i. The date that the existing Department 12 Vapor Degreaser (constructed in 1960) ceases operation;
  - ii. The date in which the Department 65/31 Vapor Degreaser ceases the usage of solvents containing VOM; and
  - iii. The date that the New Department 12 Vapor Degreaser initially begins operation.
- g. Emissions of VOM from the affected degreaser in excess of the limit specified in Condition 7.7.6 within 30 days of such an occurrence.

7.7.11 Operational Flexibility/ Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

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

- a. To determine compliance with Condition 7.7.6, solvent usage of the affected degreaser shall be determined by the following equation:

$$U = V - (W \times P)$$

Where:

- U = Solvent usage/emissions for compliance determinations (gal).
- V = Virgin solvent<sup>A</sup> added to the New Department 12 Vapor Degreaser (gal), as determined by daily addition log sheets.
- W = Waste solvent<sup>B</sup> removed from the New Department 12 Vapor Degreaser and sent off-site for reclamation or disposal (gal), as determined by monthly manifests.
- P = Percent concentration of solvent in waste (percent by weight), as determined by analysis/testing<sup>C</sup>.

<sup>A</sup> For purposes of this permit, virgin solvent is defined as unused solvent.

<sup>B</sup> For purposes of this permit, waste solvent is defined as used solvent.

<sup>C</sup> The percent concentration of solvent in waste (P) shall be determined in accordance with USEPA Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW-846), Test Method 8260.

- b. To determine compliance with Conditions 5.5.1 and 7.7.6, emissions from the affected degreaser shall be calculated using the solvent density as specified in the Material Safety Data Sheet (MSDS), and the solvent usage/emissions (U) per month, as follows:

$$\text{VOM Emissions (lb)} = (\text{Solvent Usage/Emissions (U), gal}) \times (\text{Solvent Density, lb/gal})$$

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

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

This permit shield does not extend to applicable requirements which are promulgated after July 2, 1998 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

### 8.3 Emissions Trading Programs

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

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA,

emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change and the Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change [Section 39.5(12)(a) of the Act]. This notice shall:

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

#### 8.5 Testing Procedures

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

#### 8.6 Reporting Requirements

##### 8.6.1 Monitoring Reports

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

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

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

#### 8.6.2 Test Notifications

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

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

#### 8.6.3 Test Reports

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

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

- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
  - i. Illinois EPA - Air Compliance Section  
  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (MC 40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Regional Field Office  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Eisenhower Tower  
1701 First Avenue  
Maywood, Illinois 60153
  - iii. Illinois EPA - Air Permit Section (MC 11)  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner

unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

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

#### 9.4 Obligation to Comply With Other Requirements

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

#### 9.5 Liability

##### 9.5.1 Title

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

##### 9.5.2 Liability of Permittee

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

##### 9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit compliance certifications annually or more frequently as specified in the applicable requirement or by permit condition.

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

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

#### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
  - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
  - ii. The permitted source was at the time being properly operated;
  - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

#### 9.11 Permanent Shutdown

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

## 9.12 Reopening and Reissuing Permit for Cause

### 9.12.1 Permit Actions

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

### 9.12.2 Reopening and Revision

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

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

### 9.12.3 Inaccurate Application

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

### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee

shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

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

#### 9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

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

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

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

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

where

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

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

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

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

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

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

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

Table 1

Contemporaneous VOM Increases

<u>Emission Unit</u>	<u>Permit</u>	<u>VOM (Ton/yr)</u>
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There have been no contemporaneous VOM increases at this source.

Table 2

Contemporaneous VOM Decreases

<u>Emission Unit</u>	<u>Permit</u>	<u>VOM* (Ton/yr)</u>
Existing Department 12 Vapor Degreaser	73090103	51.5
Department 65/31 Vapor Degreaser	73090103	62.8
	Total	114.3

Table 3

Net VOM Emission Increase

	<u>VOM (Ton/yr)</u>
New Department 12 Vapor Degreaser	87.6
Contemporaneous Increase	0.0
Contemporaneous Decrease	-114.3
	-26.7

\* Based upon the actual VOM emissions from the existing Department 12 Vapor Degreaser and the Department 65/31 Vapor Degreaser averaged over two last years of operation (1996-1997).

