

217/782-2113

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

PERMITTEE

Palex Container Systems  
Attn: Samuel Fiegura  
2300 West 13th Street  
Chicago, Illinois 60608

Application No.: 95120062                      I.D. No.: 031600AXT  
Applicant's Designation:                      Date Received: December 6, 1995  
Operation of: Steel Drum Reconditioning Facility  
Date Issued: September 14, 2000              Expiration Date<sup>2</sup>: September 14, 2005  
Source Location: 610 West 81st Street, Chicago, Cook County, 60620  
Responsible Official: Samuel Fiegura

This permit is hereby granted to the above-designated Permittee to operate a Steel Drum Reconditioning facility, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

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

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

DES:RWB:psj

cc: Illinois EPA, FOS, Region 1  
USEPA  
J. Armitage, Illinois EPA, DLC

<sup>1</sup> This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit.

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

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 SOURCE IDENTIFICATION	4
1.1 Source	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0 INSIGNIFICANT ACTIVITIES	7
3.1 Identification of Insignificant Activities	
3.2 Compliance with Applicable Requirements	
3.3 Addition of Insignificant Activities	
4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE	9
5.0 OVERALL SOURCE CONDITIONS	10
5.1 Source Description	
5.2 Applicable Regulations	
5.3 Non-Applicability of Regulations of Concern	
5.4 Source-Wide Operational and Production Limits and Work Practices	
5.5 Source-Wide Emission Limitations	
5.6 General Recordkeeping Requirements	
5.7 General Reporting Requirements	
5.8 General Operational Flexibility/ Anticipated Operating Scenarios	
5.9 General Compliance Procedures	
6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)	16
6.1 Description of ERMS	
6.2 Applicability	
6.3 Recordkeeping and Reporting	
6.4 Federal Enforceability	
7.0 UNIT SPECIFIC CONDITIONS	18
7.1 Units 1 - 4 Coating Lines #1 thru #4 Controls WC-1 & WC-2 Water Curtains	
7.2 Unit DRF-1 Gas Fired Drum Furnace Control DFA-1 Afterburner	
7.3 Units SB-1 and SB-2 Shot Blasters SB-1 and SB-2 Controls BH-1 and BH-2 Baghouses BH-1 and BH-2	
8.0 GENERAL PERMIT CONDITIONS	41

8.1	Permit Shield	
8.2	Applicability of Title IV Requirements	
8.3	Emissions Trading Programs	
8.4	Operational Flexibility/Anticipated Operating Scenarios	
8.5	Testing Procedures	
8.6	Reporting Requirements	
8.7	Obligation to Comply with Title I Requirements	
		<u>PAGE</u>
9.0	STANDARD PERMIT CONDITIONS	46
9.1	Effect of Permit	
9.2	General Obligations of Permittee	
9.3	Obligation to Allow Illinois EPA Surveillance	
9.4	Obligation to Comply with Other Requirements	
9.5	Liability	
9.6	Recordkeeping	
9.7	Annual Emissions Report	
9.8	Requirement for Compliance Certification	
9.9	Certification	
9.10	Defense to Enforcement Actions	
9.11	Permanent Shutdown	
9.12	Reopening And Reissuing Permit For Cause	
9.13	Severability Clause	
9.14	Permit Expiration and Renewal	
10.0	ATTACHMENTS	
10.1	Attachment 1 - Emissions of Particulate Matter from New Process Emission Units	1-1
10.2	Attachment 2 - Example Certification by a Responsible Official	2-1

1.0 SOURCE IDENTIFICATION

1.1 Source

Palex Container Systems - Hansen Division  
610 West 81st Street  
Chicago, Illinois 60620  
312/483-5050

I.D. No.: 031600AXT  
Standard Industrial Classification: 3412, Surface Coatings

1.2 Owner/Parent Company

Palex Container Systems  
6829 Flintlock Road  
Houston, Texas 77040

1.3 Operator

Palex Container Systems  
2300 West 13th Street  
Chicago, Illinois 60608

Sam Fiegura  
312/829-3838

1.4 General Source Description

Palex Container Systems (formerly Hansen-Sterling Drum Company) is located at 610 West 81st Street in Chicago. The source reconditions and recycles industrial shipping containers. Coatings are used to provide a durable, protective finish that resist weathering, abrasion, impacts, and in the case of interior linings, provide chemical resistance to the contents of the container. The drums are cleaned to remove residue either in a drum furnace or by using a caustic solution washer. The method chosen depends on the residue material and type of drum. The drums are then shot blasted to complete the cleaning process and then are coated. The source has four coating booths for interior, and exterior coatings. After the coating operation is complete, the finished drums have cover gaskets glued onto the covers.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
ACMA	Alternative Compliance Market Account
AP-42	Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
ATU	Allotment Trading Unit
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
°F	degrees Fahrenheit
FIFRA	Federal Insecticide, Fungicides, and Rodenticide Act [7 U.S.C. Section 136 et seq.]
ft <sup>3</sup>	cubic foot
gal	gallon
gr	grains
HAP	Hazardous Air Pollutants
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
l	liter
lb	pound
m <sup>3</sup>	cubic meter
Mft <sup>3</sup>	Million cubic feet
Mg	Metric Tonnes or Megagrams
mg	milligrams
mmBtu	Million Btus
mo	month
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
scm	standard cubic meters
SO <sub>2</sub>	Sulfur Dioxide

T	Ton
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
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:

3 mmBtu/Hr Gas-Fired Drum Dryers  
Automatic Tank  
Skimmed Oil Storage Tank  
Drum Gasket Installation

- 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:

Water Recycle System  
Tight Head and Open Head Rinsers  
Tight Head and Open Head Chime Machines  
Tight Head and Open Head Testers  
Tight Head Progressive Unit  
Tight Head Drum Cutter  
Tight Head Flanger  
Open head Body roller  
Open Head Expander  
Tight Head Seamer  
Drum Cover Reroller

- 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)].

- 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
Ring Dip Booth (RD-1)	Drum Rings hand dipped and air dried	October, 1981	None
Coating Booth (SPB-2)	Open head spray booth for interior and exterior coating	October, 1981	Water Curtain (WC-1)
Coating Booth (SPB-1)	Tight head spray booth for interior and exterior coating	October, 1981	Water Curtain (WC-2)
Coating Booth (LB-1)	Lid spray booth for interior and exterior coating	October, 1981	Water Curtain (WC-1)
Baking Oven (OV-1)	Gas Fired Oven for drying coated metal parts in line with coating booths SPB-2 & LB-1	October, 1981	None
Baking Oven (OV-2)	Gas Fired Oven for drying coated metal parts in line with coating booth SPB-1	October, 1981	None
Drum Furnace (DRF-1)	Natural Gas-Fired Drum Cleaning Furnace (11.7 mmBtu/hr)	November, 1993	Afterburner (DFA-1)
Shot Blaster (SB-1)	Shot Blasting to remove scales	October, 1981	Baghouse (BH-1)
Shot Blaster (SB-2)	Shot Blasting to remove scales	October, 1981	Baghouse (BH-2)

## 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 emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

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

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

#### 5.2.3 Operating Program for Particulate Matter

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

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

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

5.2.7 PM<sub>10</sub> Contingency Measure Plan

Should this stationary source, as defined in 35 IAC 212.700, become subject to the requirement to prepare and submit a contingency measure plan reflecting the PM<sub>10</sub> emission reductions as set forth in 35 IAC 212.703, then the owner or operator shall submit such plan to the Illinois EPA for review and approval within ninety (90) days after the date this source becomes subject to this requirement. Such plan will be incorporated by reference into this permit and shall be implemented in accordance with 35 IAC 212.704. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U, incorporated herein by reference.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Nitrogen Oxides (NO <sub>x</sub> )	5.26
Particulate Matter (PM)	6.04
Sulfur Dioxide (SO <sub>2</sub> )	0.02
Volatile Organic Material (VOM)	47.69
HAP, not included in VOM or PM	----
TOTAL	59.01

5.5.2 Emissions of Hazardous Air Pollutants

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

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

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

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

5.6.2 Records for Natural Gas Usage

The Permittee shall maintain records of the following items for the units which combust natural gas so as to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas usage of the source, Mft<sup>3</sup>/mo and Mft<sup>3</sup>/yr; and
- b. Records of the monthly and aggregate annual NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the combustion of natural gas at the source shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

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

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Fuel Combustion Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7 and the use of USEPA approved emissions estimating guidance.

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10<sup>6</sup> ft<sup>3</sup>)</u>
NO <sub>x</sub>	100
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5

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

Natural Gas Combustion Emissions (lb) = (Natural Gas Consumed, Mft<sup>3</sup>) x (The Appropriate Emission Factor, lb/Mft<sup>3</sup>)

## 6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

### 6.1 Description of ERMS

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

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

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

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

### 6.2 Applicability

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

permit. This limitation is established at the request of the source to exempt it from the requirements of 35 IAC Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 IAC 205.205.

### 6.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to determine compliance with the above limitation:
  - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
  - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.
- b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by November 30 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 IAC 205.205(b) and 35 IAC 205.300.
- c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.

### 6.4 Federal Enforceability

Section 6.0 becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Units 1 - 4 Coating Lines #1 thru #4  
Controls WC-1 & WC-2 Water Curtains

7.1.1 Description

This source is a reconditioner of steel drums. After preliminary cleaning operation, coating operations are conducted with paint spray booths and bake (drying) ovens.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Ring Dip Booth (RD-1)	Drum Rings hand dipped and air dried	None
Coating Booth (SPB-2)	Open head spray booth for interior and exterior coating	Water Curtain (WC-1)
Coating Booth (SPB-1)	Tight head spray booth for interior and exterior coating	Water Curtain (WC-2)
Coating Booth (LB-1)	Lid spray booth for interior and exterior coating	Water Curtain (WC-1)
Baking Oven (OV-1)	Gas Fired Oven for drying coated metal parts in line with coating booths SPB-2 & LB-1	None
Baking Oven (OV-2)	Gas Fired Oven for drying coated metal parts in line with coating booth SPB-1	None

7.1.3 Applicability Provisions and Applicable Regulations

- a. Coating Lines #1, 2, 3, and 4, which are comprised on the equipment listed in Condition 7.1.2 are "affected coating lines" for the purpose of these unit-specific conditions.
- b. Each affected coating line is subject to the emission limits identified in Condition 5.2.2.
- c. The affected coating lines are subject to 35 IAC 212.321(a), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for

which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

- d. Except as otherwise provided in Condition 7.1.4(a) (see also 35 IAC 212.324(d)), no person shall cause or allow the emission into the atmosphere, of PM<sub>10</sub>, from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period [35 IAC 212.324(b)].
- e. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].
- f. Pursuant to 35 IAC 218.204, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. The emission limitations are as follows:

- i. Miscellaneous Metal Parts and Products  
Coating/Extreme Performance Coating Air Dried  
[35 IAC 218.204(j)(2)(A)]:

kg/l	lb/gal
0.42	3.5

- ii. Miscellaneous Metal Parts and Products  
Coating/Extreme Performance Coating Baked [35 IAC 218.204(j)(2)(B)]:

kg/l	lb/gal
0.40	3.3

- iii. Miscellaneous Metal Parts and Products  
Coatings/Steel Pail and Drum Interior Coating  
[35 IAC 218.204(j)(3)]:

kg/l	lb/gal
0.52	4.3

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

- a. The mass emission limits contained in Condition 7.1.3(d) (see also 35 IAC 212.324(b)) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, this Condition is not a defense finding of a violation of the mass emission limits contained in 7.1.3(d) (see also 35 IAC 212.324(b)) [35 IAC 212.324(d)].
- b. The curing and drying ovens associated with the affected coating lines are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the actual heat input of each unit is less than 2.9 MW (10 mmBtu/hr) and the curing and drying ovens are not by definition fuel combustion emission units.
- c. The curing and drying ovens associated with the affected coating lines are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr) and the curing and drying ovens are not by definition fuel combustion emission units.
- d. No owner or operator of a coating line subject to the limitations of 35 IAC 218.204 is required to meet the limitations of 35 IAC 218.301 or 218.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

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

- a. Maintenance and Repair. Pursuant to 35 IAC 212.324(f), for any process emission unit subject to 35 IAC 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in Condition 7.1.3(d) (see also 35 IAC 212.324) shall be met at all times. This Condition shall not affect the applicability of 35 IAC 201.149. Proper maintenance shall include the following minimum requirements:
  - i. Visual inspections of air pollution control equipment [35 IAC 212.324(f)(1)];
  - ii. Maintenance of an adequate inventory of spare parts [35 IAC 212.324(f)(2)]; and

- iii. Expeditious repairs, unless the emission unit is shutdown [35 IAC 212.324(f)(3)].
- b. The Permittee shall follow good operating practices for the water curtains, including periodic inspection, routine maintenance and prompt repair of defects.
- c. The curing and drying ovens associated with the affected coating lines shall only be operated with natural gas as the fuel.

#### 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. The VOM content of each coating shall be determined by the applicable test methods and procedures specified in 35 IAC 218.105 to establish the records required under Condition 7.1.9(c) (see also 35 IAC 218.211) [35 IAC 218.211(a)].
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the VOM content of specific coatings and cleaning solvents used on the affected coating line shall be determined as follows:
  - i. The VOM content of representative coatings "as applied" on the affected coating line shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a).
  - ii. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.1.9(c) directly reflect the application of such material and separately account for any additions of solvent.

#### 7.1.8 Monitoring Requirements

None

#### 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating line to demonstrate compliance with Conditions 5.5.1, 7.1.3, and 7.1.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of VOM content of coatings and cleaning solvents pursuant to Condition 7.1.7, which include the following [Section 39.5(7)(e) of the Act]:
  - i. Identification of material tested;
  - ii. Results of analysis;
  - iii. Documentation of analysis methodology; and
  - iv. Person performing analysis.

- b. Recordkeeping of Maintenance and Repair
  - i. Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with Condition 7.1.5(a) (see also 35 IAC 212.324(f)) [35 IAC 212.324(g)(1)].
  - ii. The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made [35 IAC 212.324(g)(2)].
  - iii. A written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated [35 IAC 212.324(g)(3)].
  - iv. Copies of all records required by this Condition (see also 35 IAC 212.324(g)) shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA [35 IAC 212.324(g)(4)].
  - v. The records required under this Condition (see also 35 IAC 212.324(g)) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours [35 IAC 212.324(g)(5)].
- c. Pursuant to 35 IAC 218.211(c)(2), the Permittee shall collect and record all of the following information each day for the affected coating lines and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating as applied on each affected coating line [35 IAC 218.211(c)(2)(A)]; and
  - ii. The weight of VOM per volume of each coating (minus water and any compounds which are

specifically exempted from the definition of VOM) as applied each day on each affected coating line [35 IAC 218.211(c)(2)(B)].

- d. Records addressing use of good operating practices for the water curtains:
  - i. Records for periodic inspection of the water curtains 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.
- e. Coating usage, gal/mo and gal/yr;
- f. The VOM content of coatings, % by Wt;
- g. Density of coatings, lb/gal;
- h. Amount of waste paint sludge sent off site for reclamation or disposal, gal/mo and gal/yr;
- i. The weight of VOM per volume of waste paint sludge analyzed quarterly (every three months);
- j. Cleanup solvent usage, gal/mo and gal/yr;
- k. Density of solvent, lb/gal;
- l. Amount of cleanup solvent reclaimed for reuse or sent off site for disposal, gal/mo and gal/yr;
- m. The weight of VOM per volume of waste solvent analyzed quarterly (every three months);and
- n. The monthly and aggregate annual PM and VOM emissions from the affected coating lines based on the coating and solvent usage, with supporting calculations.

#### 7.1.10 Reporting Requirements

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

- a. Upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made [35 IAC 212.324(g)(6)].
- b. Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.1.3(f) (see also 35 IAC 218.204) within 30 days following the occurrence of the violation.
- c. Pursuant to 35 IAC 218.211(c)(3)(B), at least 30 calendar days before changing the method of compliance with 35 IAC 218 Subpart F from Condition 7.1.3(f) (see also 35 IAC 218.204) to 35 IAC 218.205 or 218.207, the owner or operator shall comply with all requirements of 35 IAC 218.211(d)(1) or (e)(1). Upon changing the method of compliance with 35 IAC 218 Subpart F from Condition 7.1.3(f) (see also 35 IAC 218.204) to 35 IAC 218.205 or 218.207, the owner or operator shall comply with all requirements of 35 IAC 218.211(d) or (e), respectively.
- d. Continued operation of the affected coating line with a defect in the filters that may result in emissions of particulate matter in excess of limits in Condition 7.1.3(b), (c), or (d) within 30 days of such an occurrence.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

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

Usage of coatings at this source with various VOM contents provided that the materials are tested in accordance with the conditions of this section, the source wide emission limitations in Condition 5.5.1 are not exceeded and the affected coating lines remain in compliance.

#### 7.1.12 Compliance Procedures

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

- a. Compliance with Condition 7.1.3(b), (c), and (d) is assumed by proper operation of the water curtains, as addressed by Conditions 7.1.5(a) and 7.1.9(d).
- b. Compliance with Condition 7.1.3(e) is assumed by the work-practices inherent in operation of natural gas-fired drying/curing ovens.
- c. To determine compliance with Condition 5.5.1, emissions from the affected coating lines shall be calculated based on the following:

- i. Volatile Organic Material Emissions:

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

- ii. Particulate Matter Emissions:

$$\text{PM (lb)} = (\text{Wt of Coating Used, lb}) \times (\text{Wt \% Solids}) \times [1 - (\text{Transfer Efficiency}^* (\%)/100)] \times [1 - (\text{Water Curtain Efficiency}^* (\%)/100)]$$

\*As specified by manufacturer or vendor of the affected coating lines and water curtains.

- 7.2 Unit DRF-1 Gas Fired Drum Furnace
- Control DFA-1 Afterburner

7.2.1 Description

The open head drums and the lids prior to their coating application are cleaned to remove residue in the drum furnace.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Drum Furnace (DRF-1)	Natural Gas-Fired Drum Cleaning Furnace (11.7 mmBtu/hr)	Afterburner (DFA-1)

7.2.3 Applicability Provisions and Applicable Regulations

- a. Drum Furnace DRF-1 is an "affected furnace" for the purpose of these unit-specific conditions.
- b. Each affected furnace is subject to the emission limits identified in Condition 5.2.2.
- c. The affected furnace is subject to 35 IAC 212.321(a), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

- d. Except as otherwise provided in Condition 7.2.4(a) (see also 35 IAC 212.324(d)), no person shall cause or allow the emission into the atmosphere, of PM<sub>10</sub>, from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period [35 IAC 212.324(b)].
- e. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].

- f. The affected furnace is subject to 35 IAC 218 Subpart G, Use of Organic Material, which provides that:
  - i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in Condition 7.2.3(f)(ii) (see also 35 IAC 218.302) and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 218.301].
  - ii. Emissions of organic material in excess of those permitted by Condition 7.2.3(f)(i) (see also 35 IAC 218.301) are allowable if such emissions are controlled by flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water [35 IAC 218.302(a)].

#### 7.2.4 Non-Applicability of Regulations of Concern

- a. The mass emission limits contained in Condition 7.2.3(d) (see also 35 IAC 212.324(b)) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, this Condition is not a defense finding of a violation of the mass emission limits contained in 7.2.3(d) (see also 35 IAC 212.324(b)) [35 IAC 212.324(d)].
- b. The affected furnace is not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the affected furnace is not by definition a fuel combustion emission unit.
- c. The affected furnace is not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of the affected furnace is less than 73.2 MW (250 mmBtu/hr) and the affected furnace is not by definition a fuel combustion emission unit.

#### 7.2.5 Operational and Production Limits and Work Practices

- a. Maintenance and Repair. Pursuant to 35 IAC 212.324(f), for any process emission unit subject to 35 IAC 212.324(a), the owner or operator shall

maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in Condition 7.2.3(d) (see also 35 IAC 212.324) shall be met at all times. This Condition shall not affect the applicability of 35 IAC 201.149. Proper maintenance shall include the following minimum requirements:

- i. Visual inspections of air pollution control equipment [35 IAC 212.324(f)(1)];
  - ii. Maintenance of an adequate inventory of spare parts [35 IAC 212.324(f)(2)]; and
  - iii. Expeditious repairs, unless the emission unit is shutdown [35 IAC 212.324(f)(3)].
- b. The secondary combustion chamber (Afterburner) of the affected furnace shall be preheated to the manufacturer's recommended temperature but not lower than 1600°F prior to introducing drums into the furnace. This temperature shall be maintained until burnout of residue from the drums or lids in the primary chamber is completed.
- c. i. The Permittee shall not knowingly accept drums which have contained contain pesticides subject to registration under the Federal Insecticide, Fungicides, and Rodenticide Act ("FIFRA") or regulations promulgated thereunder.
- ii. The Permittee shall require certification by its suppliers that any drums being shipped to the source have not contained pesticides subject to registration under FIFRA.
- d. The Permittee shall not introduce into the affected furnace any drums, which contain materials that are subject to 35 IAC Part 721, unless the drums comply with 35 IAC 721.107. The Permittee shall not knowingly introduce into the affected furnace any drum which does not meet the definition of "empty" set forth in 35 IAC 721.107.
- e. The affected furnace shall only be operated with natural gas.
- f. The Permittee shall follow good operating practices for the afterburners, including periodic inspection, routine maintenance and prompt repair of defects.

7.2.6 Emission Limitations

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

- a. Emissions and operation of equipment shall not exceed the following limits:

Emission Unit	Operating Hours	PM		NO <sub>x</sub>		VOM	
	(Hour/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)
Drum Furnace w/after-burner	2,600	7.32	9.52	0.6	0.8	8	10.4

The limits for nitrogen oxides are based on the standard emission factor for drum furnaces and a drum throughput of 300 drums per hour. Particulate matter and volatile organic material emissions limits are based on the allowable limits in 35 IAC 212.321 and 218.301, respectively.

- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- c. The above limitations were established in Permit 93080006, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 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 the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 and 35 IAC Part 203 [T1].

7.2.7 Testing Requirements

- a. Pursuant to 35 IAC 212.108 and Section 39.5(7)(b) of the Act, testing for PM<sub>10</sub> emissions shall be performed as follows:
  - i. Pursuant to 35 IAC 212.108(a), emissions of PM<sub>10</sub> shall be measured by any of the following methods at the option of the owner or operator of an emission unit.

- A. Method 201, 40 CFR part 51, Appendix M [35 IAC 212.108(a)(1)];
  - B. Method 201A, 40 CFR part 51, Appendix M [35 IAC 212.108(a)(2)]; or
  - C. Method 5, 40 CFR part 60, Appendix A, provided that all particulate matter measured by Method 5 shall be considered to be PM<sub>10</sub> [35 IAC 212.108(a)(3)].
- ii. Emissions of condensible PM<sub>10</sub> shall be measured by Method 202, 40 CFR part 51, Appendix M [35 IAC 212.108(b)].
  - iii. The volumetric flow rate and gas velocity for stack test methods shall be determined in accordance with Methods 1, 1A, 2, 2A, 2C, 2D, 3, or 4, 40 CFR part 60, Appendix A [35 IAC 212.108(c)].
  - iv. Upon a written notification by the Illinois EPA, the owner or operator of a PM<sub>10</sub> emission unit subject to Condition 7.2.7 (see also 35 IAC 212.108) shall conduct the applicable testing for PM<sub>10</sub> emissions, condensible PM<sub>10</sub> emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.108].
- b. Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:
    - i. Measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].
    - ii. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].
    - iii. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part

212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].

- c. Upon written request by the Illinois EPA, pursuant to 35 IAC 218.105(d)(1) and Section 39.5(7)(b) of the Act, the control device efficiency shall be determined by simultaneously measuring the inlet and outlet gas phase VOM concentrations and gas volumetric flow rates in accordance with the gas phase test methods specified below (see also 35 IAC 218.105(f)):
  - i. Volatile Organic Material Gas Phase Source Test Methods The methods in 40 CFR Part 60, Appendix A, delineated below shall be used to determine control device efficiencies [35 IAC 218.105(f)].
    - A. CFR Part 60, Appendix A, Method 18, 25 or 25A, as appropriate to the conditions at the site, shall be used to determine VOM concentration. Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. The test shall consist of three separate runs, each lasting a minimum of 60 min, unless the Illinois EPA and the USEPA determine that process variables dictate shorter sampling times [35 IAC 218.105(f)(1)].
    - B. 40 CFR Part 60, Appendix A, Method 1 or 1A shall be used for sample and velocity traverses [35 IAC 218.105(f)(2)].
    - C. 40 CFR Part 60, Appendix A, Method 2, 2A, 2C or 2D shall be used for velocity and volumetric flow rates [35 IAC 218.105(f)(3)].
    - D. 40 CFR Part 60, Appendix A, Method 3 shall be used for gas analysis [35 IAC 218.105(f)(4)].

- E. 40 CFR Part 60, Appendix A, Method 4 shall be used for stack gas moisture [35 IAC 218.105(f)(5)].
  - F. 40 CFR Part 60, Appendix A, Methods 2, 2A, 2C, 2D, 3 and 4 shall be performed, as applicable, at least twice during each test run [35 IAC 218.105(f)(6)].
  - G. Use of an adaptation to any of the test methods specified in Conditions 7.2.7(b)(i)(A), (B), (C), (D), (E) and (F) (see also 35 IAC 218.105(f)(1), (2), (3), (4), (5) and (6)) may not be used unless approved by the Illinois EPA and the USEPA on a case by case basis. An owner or operator must submit sufficient documentation for the Illinois EPA and the USEPA to find that the test methods specified in Conditions 7.2.7(b)(i)(A), (B), (C), (D), (E) and (F) (see also 35 IAC 218.105(f)(1), (2), (3), (4), (5) and (6)) will yield inaccurate results and that the proposed adaptation is appropriate [35 IAC 218.105(f)(7)].
- ii. Notwithstanding other requirements of 35 IAC Part 218, upon request of the Illinois EPA where it is necessary to demonstrate compliance, an owner or operator of an emission unit which is subject to 35 IAC Part 218 shall, at his own expense, conduct tests in accordance with the applicable test methods and procedures specific in this Part. Nothing in this Condition (see also 35 IAC 218.105) shall limit the authority of the USEPA pursuant to the Clean Air Act, as amended, to require testing [35 IAC 218.105(i)].

#### 7.2.8 Monitoring Requirements

- a. An owner or operator that uses an afterburner to comply with any Section of 35 IAC Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the afterburner is in use. The continuous monitoring equipment must monitor for each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner [35 IAC 218.105(d)(2)(A)(i)].

- b. Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall inspect the condition of the affected furnace on a periodic basis for the presence of any deficiencies.

#### 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 furnace to demonstrate compliance with Conditions 5.5.1, 7.2.3, 7.2.5, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Pursuant to 35 IAC 212.108(f), 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:
  - i. The date, place and time of sampling or measurements;
  - ii. The date(s) analyses were performed;
  - iii. The company or entity that performed the analyses;
  - iv. The analytical techniques or methods used;
  - v. The results of such analyses; and
  - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Recordkeeping of Maintenance and Repair
  - i. Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with Condition 7.2.5(a) (see also 35 IAC 212.324(f)) [35 IAC 212.324(g)(1)].
  - ii. The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation.

These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made [35 IAC 212.324(g)(2)].

- iii. A written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated [35 IAC 212.324(g)(3)].
  - iv. Copies of all records required by this Condition (see also 35 IAC 212.324(g)) shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA [35 IAC 212.324(g)(4)].
  - v. The records required under this Condition (see also 35 IAC 212.324(g)) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours [35 IAC 212.324(g)(5)].
- c. Records of equipment operation including the temperature of the afterburner combustion chamber of the affected furnace during the time of combustion;
  - d. Records addressing use of good operating practices for the afterburner:
    - i. Records for periodic inspection of the afterburner 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.
  - e. The amount of drums and/or lids cleaned in the affected furnace, drums/mo and drums/yr; and
  - f. The monthly and aggregate annual NO<sub>x</sub>, PM, and VOM emissions from the affected furnaces based on the number of drums and/or lids cleaned and the applicable emission factors, with supporting calculations.

#### 7.2.10 Reporting Requirements

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

- a. A person planning to conduct testing for PM<sub>10</sub> or condensible PM<sub>10</sub> emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to initiation of the test unless a shorter pre-notification is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.2.7(a)(i) (see also 35 IAC 212.108(a)) that will be used [35 IAC 212.108(e)].
- b. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.2.7(b) (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].
- c. Upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made [35 IAC 212.324(g)(6)].
- d. Continued operation of the affected furnace with defects in an afterburner that may result in emissions of PM, or VOM in excess of the allowable limits specified in Condition 7.2.3 and/or 7.2.6 within 30 days of such an occurrence;
- e. Any occurrence when the affected furnaces was not operated in compliance with the requirements of Condition 7.2.5, with date, description, and explanation; and

- f. Any occurrence when the monitoring system required by Condition 7.2.8 was not in service prior to initially charging drums and/or lids to the affected furnaces.
- g. Emissions of NO<sub>x</sub>, PM, and/or VOM in excess of the limits in Condition 7.2.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

### 7.2.12 Compliance Procedures

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

- a. Compliance with Conditions 7.2.3(b), (c), (d), and (f) is assumed to be achieved by proper operation of the afterburner, as addressed by Conditions 7.2.5(b) and (f).
- b. Compliance with Condition 7.2.3(e) is assumed to be achieved by the work-practices inherent in operation of natural gas-fired furnaces.
- c. To determine compliance with Conditions 5.5.1 and 7.2.6, NO<sub>x</sub> and PM emissions from the affected furnace shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/drum)</u>
NO <sub>x</sub>	0.00004
PM	0.02646

These are the emission factors for controlled drum burning, Table 4.8-3, AP-42, Volume I, Fifth Edition, Supplement D, January, 1995.

$$\text{NO}_x \text{ or PM Emissions (lb)} = (\text{Number of Drums Cleaned}) \times (\text{The Appropriate Emission Factor, lb/drum})$$

- d. To determine compliance with Conditions 5.5.1 and 7.2.6, VOM emissions from the affected furnace shall be calculated based on the following:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/drum)</u>
VOM	0.0013

This is the controlled emission factor which is based on the average of the results of a stack test, which was performed on March 2, 1994 in the absence of more recent testing pursuant to Condition 7.2.7.

$$\text{VOM Emissions (lb)} = (\text{Number of Drums Cleaned}) \times (\text{The Appropriate Emission Factor, lb/drum})$$

7.3 Units SB-1 and SB-2 Shot Blasters SB-1 and SB-2  
Controls BH-1 and BH-2 Baghouses BH-1 and BH-2

7.3.1 Description

The source is a reconditioner of steel drums. After preliminary cleaning, the drums and lids are shotblasted to remove scales.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Shot Blaster (SB-1)	Shot Blasting to remove scales	Baghouse (BH-1)
Shot Blaster (SB-2)	Shot Blasting to remove scales	Baghouse (BH-2)

7.3.3 Applicability Provisions and Applicable Regulations

- a. Shot Blasters SB-1 and SB-2 are "affected shot blasters" for the purpose of these unit-specific conditions.
- b. Each affected shot blaster is subject to the emission limits identified in Condition 5.2.2.
- c. Except as otherwise provided in Condition 7.3.4(a) (see also 35 IAC 212.324(d)), no person shall cause or allow the emission into the atmosphere, of PM<sub>10</sub>, from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period [35 IAC 212.324(b)].

7.3.4 Non-Applicability of Regulations of Concern

- a. The mass emission limits contained in Condition 7.3.3(c) (see also 35 IAC 212.324(b)) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, this Condition is not a defense finding of a violation of the mass emission limits contained in 7.3.3(c) (see also 35 IAC 212.324(b)) [35 IAC 212.324(d)].
- b. Pursuant to 35 IAC 212.681(c), 35 IAC 212.321, Particulate Matter from Process Emission Units, shall not apply to shot blasting.

7.3.5 Operational and Production Limits and Work Practices

- a. Maintenance and Repair. Pursuant to 35 IAC 212.324(f), for any process emission unit subject to 35 IAC 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in Condition 7.3.3(c) (see also 35 IAC 212.324) shall be met at all times. This Condition shall not affect the applicability of 35 IAC 201.149. Proper maintenance shall include the following minimum requirements:
  - i. Visual inspections of air pollution control equipment [35 IAC 212.324(f)(1)];
  - ii. Maintenance of an adequate inventory of spare parts [35 IAC 212.324(f)(2)]; and
  - iii. Expeditious repairs, unless the emission unit is shutdown [35 IAC 212.324(f)(3)].
- b. The Permittee shall follow good operating practices for the baghouses, including periodic inspection, routine maintenance and prompt repair of defects.

#### 7.3.6 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.

#### 7.3.7 Testing Requirements

Pursuant to 35 IAC 212.108 and Section 39.5(7)(b) of the Act, testing for PM<sub>10</sub> emissions shall be performed as follows:

- a. Pursuant to 35 IAC 212.108(a), emissions of PM<sub>10</sub> shall be measured by any of the following methods at the option of the owner or operator of an emission unit.
  - i. Method 201, 40 CFR part 51, Appendix M [35 IAC 212.108(a)(1)];
  - ii. Method 201A, 40 CFR part 51, Appendix M [35 IAC 212.108(a)(2)]; or
  - iii. Method 5, 40 CFR part 60, Appendix A, provided that all particulate matter measured by Method 5 shall be considered to be PM<sub>10</sub> [35 IAC 212.108(a)(3)].

- b. Emissions of condensible PM<sub>10</sub> shall be measured by Method 202, 40 CFR part 51, Appendix M [35 IAC 212.108(b)].
- c. The volumetric flow rate and gas velocity for stack test methods shall be determined in accordance with Methods 1, 1A, 2, 2A, 2C, 2D, 3, or 4, 40 CFR part 60, Appendix A [35 IAC 212.108(c)].
- d. Upon a written notification by the Illinois EPA, the owner or operator of a PM<sub>10</sub> emission unit subject to Condition 7.3.7 (see also 35 IAC 212.108) shall conduct the applicable testing for PM<sub>10</sub> emissions, condensible PM<sub>10</sub> emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.108].

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected shot blaster to demonstrate compliance with Conditions 5.5.1, 7.3.3, and 7.3.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Pursuant to 35 IAC 212.108(f) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:
  - i. The date, place and time of sampling or measurements;
  - ii. The date(s) analyses were performed;
  - iii. The company or entity that performed the analyses;
  - iv. The analytical techniques or methods used;
  - v. The results of such analyses; and

- vi. The operating conditions as existing at the time of sampling or measurement.
- b. Recordkeeping of Maintenance and Repair
- i. Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with Condition 7.3.5(a) (see also 35 IAC 212.324(f)) [35 IAC 212.324(g)(1)].
  - ii. The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made [35 IAC 212.324(g)(2)].
  - iii. A written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated [35 IAC 212.324(g)(3)].
  - iv. Copies of all records required by this Condition (see also 35 IAC 212.324(g)) shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA [35 IAC 212.324(g)(4)].
  - v. The records required under this Condition (see also 35 IAC 212.324(g)) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours [35 IAC 212.324(g)(5)].
- c. Records addressing use of good operating practices for the baghouses:
- i. Records for periodic inspection of the baghouses with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for prompt repair of defects, with identification and description of defect,

effect on emissions, date identified, date repaired, and nature of repair.

- d. Shot usage of the affected shot blasters, lb/mo and ton/yr; and
- e. The monthly and aggregate annual PM emissions from the affected shot blasters based on the operating schedule and the typical hourly emission rate, with supporting calculations.

#### 7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected shot blasters 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. A person planning to conduct testing for PM<sub>10</sub> or condensable PM<sub>10</sub> emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to initiation of the test unless a shorter pre-notification is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.3.7(a)(i) (see also 35 IAC 212.108(a)) that will be used [35 IAC 212.108(e)].
- b. Upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made [35 IAC 212.324(g)(6)].

#### 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:

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

$$\text{PM (lb)} = (\text{Shot Usage, lb}) \times [1 - (\text{Baghouse Efficiency}^* (\%)/100)]$$

\*As specified by manufacturer or vendor of the baghouses.

## 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 August 1, 2000 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

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

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

### 8.3 Emissions Trading Programs

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

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

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

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

#### 8.5 Testing Procedures

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

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

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

<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  
9511 West Harrison  
Des Plaines, Illinois 60016
  - iii. Illinois EPA - Air Permit Section (MC 11)  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section  
P.O. Box 19506

Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (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)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

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

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

#### 9.4 Obligation to Comply With Other Requirements

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

#### 9.5 Liability

##### 9.5.1 Title

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

##### 9.5.2 Liability of Permittee

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

##### 9.5.3 Structural Stability

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

#### 9.5.4 Illinois EPA Liability

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

#### 9.5.5 Property Rights

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

### 9.6 Recordkeeping

#### 9.6.1 Control Equipment Maintenance Records

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

#### 9.6.2 Records of Changes in Operation

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

#### 9.6.3 Retention of Records

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

### 9.7 Annual Emissions Report

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

#### 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

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

#### 9.9 Certification

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

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

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

##### 9.10.2 Emergency Provision

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

#### 9.11 Permanent Shutdown

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

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

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

#### 9.12.2 Reopening and Revision

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

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

#### 9.12.3 Inaccurate Application

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

#### 9.12.4 Duty to Provide Information

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

#### 9.13 Severability Clause

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

#### 9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 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 14, 1972 [35 IAC 212.321(c)]:

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

10.2 Attachment 2 Example Certification by a Responsible Official

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

Signature \_\_\_\_\_

Name \_\_\_\_\_

Official Title \_\_\_\_\_

Telephone No. \_\_\_\_\_

Date Signed \_\_\_\_\_

RWB:psj