217/782-2113

"REVISED"

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

and

TITLE I PERMIT[1]

PERMITTEE

Borg-Warner Transmission Systems
Attn.: Ms. Shelley J. Coburn
700 S. 25th Avenue
Bellwood, Illinois 60104

Application No.: 96030033 I.D. No.: 031015AAC
Applicant's Designation: Date Received: March 5, 1996
Operation of: Automatic Transmission Component Manufacturing
Date Issued: July 27, 1999
Source Location: 700 S. 25th Avenue, Bellwood, Cook County
Responsible Official: Mr. Douglas A. Grube and Ms. Shelley J. Coburn
Expiration Date[2]: July 27, 2004

This permit is hereby granted to the above-designated Permittee to operate a Automatic Transmission Component Manufacturing Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: July 17, 2000
Revision Date Issued: October 26, 2000
Purpose of Revision: Administrative Amendment

This administrative amendment incorporates the equipment listed in construction permit 00070085 and changes the name of the source from Borg-Warner Automotive Transmission and Engine Components Corporation to Borg-Warner Transmission Systems. Because the changes in the permit were only administrative, no formal public notice will be issued.

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this permitting action. If a conflict exists between this document and previous versions of the CAAPP permit, this document supercedes those terms and conditions of the permit for which the conflict exists. The previous permit issued July 27, 1999 is incorporated herein by reference.

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

[1] 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.

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

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10.0 ATTACHMENTS

1.0 SOURCE IDENTIFICATION

1.1 Source

Borg-Warner Transmission Systems
700 S. 25th Avenue
Bellwood, Illinois 60104
847/547-2762

I.D. No.: 031015AAC
Standard Industrial Classification: 3714, Motor Vehicle Parts and Accessories

1.2 Owner/Parent Company

Borg-Warner Automotive
Transmission and Engine Components Corporation
700 S. 25th Avenue
Bellwood, Illinois 60104

1.3 Operator

Borg-Warner Automotive
Transmission and Engine Components Corporation
700 S. 25th Avenue
Bellwood, Illinois 60104

Ms. Shelley Coburn, Environmental Engineer
847/547-2762

1.4 General Source Description

Borg-Warner Automotive Automatic Transmission System Corporation (Borg-Warner) is located at 700 S. 25th Avenue in Bellwood. The source manufactures friction plates used in automotive transmissions and other drive train components. A friction plate is comprised of a steel core and one or two paper facings. The steel cores are stamped from coiled steel, acid cleaned, and then coated with adhesive. Paper, saturated with resin to enhance durability, is then stamped to fit onto the steel core. In some cases, however, adhesive is applied to the paper before stamping rather than to the steel core. A friction plate is made after the paper facings and the steel cores are bonded together. As a final step, the friction plates are sanded to desired thickness and grooved to enhance the plate's performance in a transmission.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emission Reduction Market System
°F	degrees Fahrenheit
gal	gallon
gr	grains
hr	hour
HAP	Hazardous Air Pollutants
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kPa	kilopascal
kW	kilowatt
l	liter
LAER	Lowest Achievable Emission Rate
lb	pound
m^3	cubic meter
MACT	Maximum Achievable Control Technology
Mft^3	Million cubic feet
Mg	Metric Tonnes or Megagrams
min	minute
mmBtu	Million Btus
mo	month
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter

PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
scf	standard cubic feet
SO_2	Sulfur Dioxide
T	Ton
T1	Title I - identifies Title I conditions that have been carried over from an existing construction permit
T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing construction permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
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:

Aboveground Resin Storage Tanks ($\leq$ 8,812 gallons)
Acid Etching Lines (Sulfuric Acid Dip and Support Tanks)
Natural Gas-Fired Boilers (< 10 mmBtu/hr)

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Isopropyl Aboveground Storage Tanks
Quench Oil Aboveground Storage Tanks
Lime Stacking (Conveying) and Lime Slaker
One Way Clutch Lines
Shotblasters
Engineering Prototype Laboratories
Tool Rooms
Heat Treat Furnaces
Ross I and Ross II Head Cleaning and Support Operations
Alkaline Washers (3 Metal Glue Lines)
Wash & Rinse Operation (Roll Coater Glue Line)
Rinse & Dry Operation (Roll Coater Glue Line)
Wastewater Treatment
Lubricant Spraying
Sprag Cutting
Bonding Operations
Metal Stamping Operations

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

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and

(C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

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

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

Printing operations with aggregate organic solvent usage that never exceeds 750 gallons per year from all printing lines at the source, including organic solvent from inks, dilutents, fountain solutions, and cleaning materials [35 IAC 201.210(a)(14)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

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
GL1	Glue Line Dip Tank with Natural Gas-Fired Curing Oven (350,000 Btu/hr) (Glue Line 1)	1960	Thermal Oxidizer SR9000
GL2	Glue Line Dip Tank with Natural Gas-Fired Curing Oven (350,000 Btu/hr) (Glue Line 2)	1960	Thermal Oxidizer SR9000
GL3	Glue Line Dip Tank with Natural Gas-Fired Curing Oven (350,000 Btu/hr) (Glue Line 3)	1960	Thermal Oxidizer SR9000
RCGLI	Continental Equipment Corp. Model D0481-001 Roller Coater with 3 Stage Natural Gas-Fired Oven (800,000 Btu/hr) (Roll Coater Glue Line I)	September, 1997	Thermal Oxidizer SR9000
CPF1	Pollution Control Products Co. Model #27A Controlled Pyrolysis Cleaning Furnace (Controlled Pyrolysis Furnace 1)	1983	Internal Afterburner
CPF2	Pollution Control Products Company Model PTR-340 Controlled Pyrolysis Cleaning Furnace (Controlled Pyrolysis Furnace 2)	1989	Internal Afterburner
CPF3	Pollution Control Products Co. Model PRC 340 Controlled Pyrolysis Cleaning Furnace (Controlled Pyrolysis Furnace 3)	1996	Internal Afterburner
BLU SURF	Paper Gluing and Curing Process (Blu Surf)	June, 1972	BLU SURF Catalytic Oxidizer
ROSS I	Midland Ross Saturating, Pre-Curing, and Curing Line (Ross I)	May, 1980	ROSS I Thermal Oxidizer
ROSS II	Ross-Waldron Model L5093/5094 Saturating, Pre-Curing, & Curing Line (Ross II)	November, 1984	ROSS II Thermal Oxidizer
PM	Paper Machining Process (Slitting, Blanking, Sanding, Sizing, and Grooving)	Prior to April 14, 1972	Two Cyclones
VIA	Videojet Ink Application	Unknown	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of 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 This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 9 and 63, Subparts A and KK, because the source is a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated. The Illinois EPA administers the NESHAP for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

5.2.5 Any storage vessel with a capacity greater than or equal to 40 m^3 that is used to store volatile organic liquids (VOL's) for which construction, reconstruction, or modification is commenced after July 23, 1984 is subject to the NSPS for Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb.

5.2.6 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.

5.2.7 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.

5.2.8 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.

5.2.9 Episode Action Plan

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

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

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

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

i. Illinois EPA, Compliance Section; and

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

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

5.3 Non-Applicability of Regulations of Concern

5.3.1 NSPS for Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

a. Except as provided in Condition 5.6.4(a) (see also 40 CFR 60.116b) storage vessels with design capacity less than 75 m^3 are exempt from the General Provisions of the NSPS and from the provisions of 40 CFR 60 Subpart Kb [40 CFR 60.110b(b)].

b. Except as provided in Condition 5.7.4(b) (see also 40 CFR 60.116b) storage vessels with design capacity

greater than 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 150 kPa are exempt from the General Provisions of the NSPS and from the provisions of 40 CFR 60 Subpart Kb [40 CFR 60.110b(c)].

5.3.2 The source is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos, 40 CFR 61 Subparts A and M because the source no longer contains operations which manufacture friction products using commercial asbestos.

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:

5.4.1 Pursuant to 40 CFR 63.821(b), each product and packaging rotogravure or wide-web flexographic printing affected source at a facility that is a major source of HAP, as defined in 40 CFR 63.2, that complies with the criteria of Conditions 5.4.1(a) or (b) (see also 40 CFR 63.821(b)(1) and 63.821(b)(2)) on and after May 30, 1999 (the applicable compliance date as specified in 40 CFR 63.826) is subject only to the requirements of Conditions 5.6.2 and 5.9.3 (see also 40 CFR 63.829(e) and 63.830(b)(1)).

a. The owner or operator of the source applies no more than 500 kg per month, for every month, of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials on product and packaging rotogravure or wide-web flexographic printing presses [40 CFR 63.821(b)(1)], or

b. The owner or operator of the source applies no more than 400 kg per month, for every month, of organic HAP on product and packaging rotogravure or wide-web flexographic printing presses [40 CFR 63.821(b)(2)].

c. The above limitations have been established at the request of the Permittee so that the source is only subject to the recordkeeping and reporting provisions of 40 CFR 63 Subpart KK - National Emission Standards for the Printing and Publishing Industry.

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Nitrogen Oxides (NO_x)	46.86
Particulate Matter (PM)	12.91
Sulfur Dioxide (SO_2)	0.25
Volatile Organic Material (VOM)	438.44
HAP, not included in VOM or PM	--
TOTAL	498.46

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAP 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 Printing Presses

Pursuant to 40 CFR 63.829(e), the owner or operator of each facility which meets the limits and criteria of Condition 5.4.1(a) (see also 40 CFR 63.821(b)(1)) shall maintain records as required in Condition 5.6.2(a) (see also 40 CFR 63.829(e)(1)). The owner or operator of each facility which meets the limits and criteria of Condition 5.4.1(b) (see also 40 CFR 63.821(b)(2)) shall maintain records as required in Condition 5.6.2(b) (see also 40 CFR 63.829(e)(2)). Owners or operators shall maintain these records for five years, and upon request, submit them to the Illinois EPA or the USEPA.

a. For each facility which meets the criteria of Condition 5.4.1(a) (see also 40 CFR 63.821(b)(1)), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month [40 CFR 63.829(e)(1)].

b. For each facility which meets the criteria of Condition 5.4.1(b) (see also 40 CFR 63.821(b)(2)), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month [40 CFR 63.829(e)(2)].

5.6.3 NSPS Recordkeeping

a. Any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility [40 CFR 60.7(b)]

b. Any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all performance testing measurements and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, reports, and records [40 CFR 60.7(e)].

5.6.4 Records for Storage Vessels

a. The owner or operator of each storage vessel for which construction, reconstruction, or modification is commenced after July 23, 1984 with a design capacity greater than or equal to 40 m^3, but less than 75 m^3 shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m^3 is subject to no other provision of 40 CFR 60 Subpart Kb other than those required by this paragraph. This record shall be kept for the life of the source [40 CFR 60.110b(a), 60.116b(a), and 60.116b(b)].

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

5.6.5 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

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

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

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

5.7.2 Annual Emissions Report

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

5.7.3 Reporting for Printing Presses

Pursuant to 40 CFR 63.830(b)(1), each owner or operator of an affected source subject to 40 CFR 63 Subpart KK shall submit an initial notification required in 40 CFR 63.9(b). to the Administrator:

a. Initial notifications for existing sources shall be submitted no later than May 30, 1998 (one year before the compliance date specified in 40 CFR 63.826(a)) [40 CFR 63.830(b)(1)(i)].

b. Initial notifications for new and reconstructed sources shall be submitted as required by 40 CFR 63.9(b) [40 CFR 63.830(b)(1)(ii)].

c. For the purpose of 40 CFR 63 Subpart KK, a Title V or Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 and has received delegation of authority from the USEPA [40 CFR 63.830(b)(1)(iii)].

d. Permit applications shall be submitted by the same due dates as those specified for the initial notifications [40 CFR 63.830(b)(1)(iv)].

5.7.4 NSPS Reporting Requirements

a. Pursuant to 40 CFR 60.7(a)(1), the Permittee shall furnish the Illinois EPA written notification of the date of reconstruction of an existing facility is commenced so that it will become an affected facility subject to the provisions of 40 CFR Part 60 postmarked no later than 30 days after such date [40 CFR 60.7(a)(1)].

b. The owner or operator of each storage vessel with a design capacity greater than 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that this normally less than 27.6 kPa shall notify the Illinois EPA or the USEPA within 30 days when the

maximum true vapor pressure of the liquid exceeds 27.6 kPa (the maximum true vapor pressure for this volume range) [40 CFR 60.116b(d)].

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 NSPS Compliance Procedures

Pursuant to 40 CFR 60.116b(e), available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below:

a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service [40 CFR 60.116b(e)(1)].

b. Pursuant to 40 CFR 60.116b(e)(2), for crude oil or refined petroleum products the vapor pressure may be obtained by the following:

i. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in American Petroleum Institute (API) Bulletin 2517, unless the Illinois EPA or the USEPA specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from sample(s) [40 CFR 60.116b(e)(2)(i)].

ii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

c. Pursuant to 40 CFR 60.116b(e)(3), for other liquids, the vapor pressure:

i. May be obtained from standard reference texts [40 CFR 60.116b(e)(3)(i)];

ii. Determined by ASTM Method D2879-83 [40 CFR 60.116b(e)(3)(ii)];

iii. Measured by an appropriate method approved by the Illinois EPA or USEPA [40 CFR 60.116b(e)(3)(iii)]; or

iv. Calculated by an appropriate method approved by the Illinois EPA or the USEPA [40 CFR 60.116b(e)(3)(iv)].

6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

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

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

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

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

6.2 Applicability

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

6.3 Obligation to Hold Allotment Trading Units (ATUs)

a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.5.

i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;

ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;

iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);

iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and

v. VOM emissions from certain new and modified emission units as addressed by Condition 6.8(b), if applicable, in accordance with 35 IAC 205.320(f).

b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

6.4 Market Transaction

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

b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).

c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).

d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

6.5 Emission Excursion Compensation

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

a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:

i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or

ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.

b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.

c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source’s next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6.6 Quantification of Seasonal VOM Emissions

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

No exceptions

b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:

i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and

ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

6.7 Annual Account Reporting

a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:

i. Actual seasonal emissions of VOM from the source;

ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;

iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;

iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the

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

v. If a source’s baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and

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

b. This report shall be submitted by October 31 of each year, for the preceding seasonal allotment period.

6.8 Allotment of ATUs to the Source

a. i. The allotment of ATUs to this source is 577 ATUs per seasonal allotment period.

ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 65.520tons per season.

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

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

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

b. Contingent Allotments for New or Modified Emission Units

Not applicable.

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

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

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

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

6.9 Recordkeeping for ERMS

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

a. Seasonal component of the Annual Emissions Report;

b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.6(a); and

c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.10 Federal Enforceability

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

6.11 Exclusions from Further Reductions

a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:

i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;

ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and

iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

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

Fuel Combustion Emission Units (other than afterburners)

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

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

None

7.0 UNIT SPECIFIC CONDITIONS

7.1 Units 3MGL 3 Metal Glue Lines
Control SR9000 Thermal Oxidizer

7.1.1 Description

The metal glue dip process (also referred to as the 3 Metal Glue Lines) is one of the processes in the production of friction plates. This process consists of three parallel production lines designed to prepare the metal surface of steel core plates and to apply adhesive to the plate surface. The three lines serving this process are virtually identical. The major steps for each line include alkaline washing, rinsing, acid dipping, neutralization, glue application, and curing. Prior to the glue application, friction plate surfaces are prepared by alkaline washing, rinsing, acid dipping, and neutralizing. Cleaned plates are conveyed to the second floor where they are immersed into an alcohol-based glue tank. The proper glue viscosity is maintained by adding denatured alcohol. After the glue is applied, the plates are conveyed to the drying ovens. The first stage of drying is a flash zone where most of the glue's solvents (primarily ethanol) are flashed off. In the second drying stage, the glue is cured to a B-stage. Finally, the plates are cooled to ambient temperature. Both the dipping operation and the drying tunnels are exhausted to an afterburner. The next step is a bonding process where saturated paper is affixed to the plates. Bonding of friction plates is conducted using either induction stack bonding, induction dish bonding, or furnace bonding.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
GL1	Glue Line Dip Tank with Natural Gas-Fired Curing Oven (350,000 Btu/hr) (Glue Line 1)	Thermal Oxidizer SR9000
GL2	Glue Line Dip Tank with Natural Gas-Fired Curing Oven (350,000 Btu/hr) (Glue Line 2)	Thermal Oxidizer SR9000
GL3	Glue Line Dip Tank with Natural Gas-Fired Curing Oven (350,000 Btu/hr) (Glue Line 3)	Thermal Oxidizer SR9000

7.1.3 Applicability Provisions and Applicable Regulations

a. The Three Metal Glue Lines 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 212.322(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (see also Attachment 2) [35 IAC 212.322(a)].

ii. Because the expected process weight rate for each affected coating line is less than 100 pounds per hour, the allowable PM emission rate for each affected coating line set by 35 IAC 212.322 is 0.55 pounds per hour.

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].

e. The affected coating lines is subject to 35 IAC 218 Subpart F, which provides that:

i. Except as provided in Condition 7.1.3(e)(ii) (35 IAC 218.207), 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:

A. Paper Coating [35 IAC 218.204(c)]:

kg/l	lb/gal
0.28	2.3

B. 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

ii. Any owner or operator of a coating line subject to 35 IAC 218.204 may comply with 35 IAC 218.207, rather than Condition 7.1.3(e)(i) (see also 35 IAC 218.204), if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with Condition 7.1.3(e)(iii) (see also 35 IAC 218.207(c)) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Condition 7.1.7 (see also 35 IAC 218.105) and the recordkeeping and reporting requirements specified in Conditions 7.1.9 and 7.1.10 (see also 35 IAC 218.211(e)); and the control device is equipped with the applicable monitoring equipment specified in Condition 7.1.8 (see also 35 IAC 218.105(d)) and the monitoring equipment is install, calibrated, operated and maintained according to vendor specifications at all times the control device is in use [35 IAC 218.207(a)].

iii. No owner or operator of a coating line subject to the emission limitations in Condition 7.1.3(e)(i) (35 IAC 218.204(j)(2)(B)) and equipped with a capture system and control device shall operate the affected coating lines unless the coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency [35 IAC 218.207(b)(i) and 218.207(c)].

7.1.4 Non-Applicability of Regulations of Concern

a. The curing and drying ovens on 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.

b. The curing and drying ovens on 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.

c. The affected coating lines are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

d. No owner or operator of a coating line subject to the limitations of 35 IAC 218.204 is required to meet the limitations of 35 IAC 218.301 or 218.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

7.1.5 Operational and Production Limits and Work Practices

a. The afterburner shall be in operation at all time when any of the associated emission units are in operation and emitting air contaminants.

b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400^{o}F in the absence of a compliance test. This temperature shall be maintained during operation of the affected coating lines.

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

d. The affected coating lines shall only be operated with natural gas as the fuel in the curing and drying ovens.

7.1.6 Emission Limitations

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

7.1.7 Testing Requirements

a. The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test method and procedures specified in 35 IAC 218.105 to establish the records required under 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(f) directly reflect the application of such material and separately account for any additions of solvent.

c. Upon reasonable request by the Illinois EPA, pursuant to 35 IAC 218.211(e)(1), the owner or operator of the subject coating line shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with 35 IAC 218.207.

7.1.8 Monitoring Requirements

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)].

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. Records of the testing of the efficiency of each capture system and control device pursuant to Condition 7.1.7(c), which include the following [Section 39.5(7)(e) of the Act]:

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

   ii. The date(s) analyses were performed;

   iii. The company or entity that performed the analyses;

   iv. The analytical techniques or methods used;

   v. The results of such analyses; and

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

c. Pursuant to 35 IAC 218.211(e)(2), the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

i. Control device monitoring data;

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source; and

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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. Records of the coating usage for the affected coating lines, gal/mo and gal/yr;

f. The VOM content of coatings, % by Wt;

g. Density of coatings, lb/gal;

h. The solvent usage for the affected coating lines, gal/mo and gal/yr;

i. Density of solvent, lb/gal;

j. Natural gas usage of the drying ovens associated with the affected coating lines, Mft^3/mo and Mft^3/yr;

k. The monthly and aggregate annual VOM emissions from the affected coating lines based on the coating and solvent usage and the afterburner efficiency, with supporting calculations; and

l. Records of the monthly and aggregate annual NO_x, PM, SO_2, and VOM emissions from the combustion of natural gas in drying ovens associated with the affected coating lines shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.1.10 Reporting Requirements

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

Any record showing violation of Condition 7.1.3(e) (see also 35 IAC 218.207) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation [35 IAC 218.211(e)(3)(A)].

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

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

a. Compliance with Conditions 7.1.3(c) and (d) is assumed to be achieved by the work-practices inherent in operation of natural gas-fired drying ovens.

b. To determine compliance with Condition 5.5.1, VOM emissions from the affected coating lines shall be calculated based on the following:

VOM (lb) = (Coating Usage, gal) x (Coating Density, lb/gal) x (VOM Content of Coating, % by Wt) x [1 - (Afterburner Efficiency* (%)/100)] + (Cleaning Solvent Usage, gal) x (Solvent Density, lb/gal) x [1 - (Afterburner Efficiency* (%)/100)]

*As specified by manufacturer or vendor of the afterburner or by testing pursuant to Condition 7.1.7

c. To determine compliance with Condition 5.5.1, emissions from the combustion of natural gas from the drying ovens shall be calculated based on the following emission factors:

Pollutant	Emission Factor (lb/Mft^3)
NO_x	100
PM	7.6
SO_2	0.6
VOM	5.5

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

Drying Oven Emissions (lb) = (Natural Gas Consumed, Mft^3) x (The Appropriate Emission Factor, lb/Mft^3)

7.2 Unit RCGLI Roll Coater Glue Line I
Control SR9000 Thermal Oxidizer

7.2.1 Description

The Roll Coater Glue Line I produces single-sided friction plates, which alleviates the need to purchase pre-glued steel. The Roll Coater Glue Line I allows the production of single-sided friction plates from the same steel currently used to produce two-sided friction plates. VOM emissions from this roll coating process are captured and ducted to a thermal afterburner

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
RCGLI	Continental Equipment Corp. Model D0481-001 Roller Coater with B Stage Natural Gas-Fired Oven (800,000 Btu/hr) (Roll Coater Glue Line I)	Thermal Oxidizer SR9000

7.2.3 Applicability Provisions and Applicable Regulations

a. Roll Coater Glue Line I is an "affected coating line" 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 line is subject to 35 IAC 212.321(a), which provides that:

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

ii. Because the expected process weight rate for the affected coating line is less than 100 pounds per hour, the allowable PM emission rate for the affected coating line set by 35 IAC 212.321 is 0.55 pounds per hour.

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].

e. The affected coating line is subject to 35 IAC 218 Subpart F, which provides that:

i. Except as provided in Condition 7.2.3(e)(ii) (35 IAC 218.207), 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:

A. Paper Coating [35 IAC 218.204(c)]:

kg/l	lb/gal
0.28	2.3

B. 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

ii. Any owner or operator of a coating line subject to 35 IAC 218.204 may comply with 35 IAC 218.207, rather than Condition 7.2.3(e)(i) (see also 35 IAC 218.204), if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with Condition 7.2.3(e)(iii) (see also 35 IAC 218.207(c)) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Condition 7.2.7 (see also 35 IAC 218.105) and the recordkeeping and reporting

requirements specified in Conditions 7.2.9 and 7.2.10 (see also 35 IAC 218.211(e)); and the control device is equipped with the applicable monitoring equipment specified in Condition 7.2.8 (see also 35 IAC 218.105(d)) and the monitoring equipment is install, calibrated, operated and maintained according to vendor specifications at all times the control device is in use [35 IAC 218.207(a)].

iii. No owner or operator of a coating line subject to the emission limitations in Condition 7.2.3(e)(i) (35 IAC 218.204(j)(2)(B)) and equipped with a capture system and control device shall operate the affected coating line unless the coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency [35 IAC 218.207(b)(i) and 218.207(c)].

7.2.4 Non-Applicability of Regulations of Concern

a. The B stage drying oven on the affected coating line is 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 3 stage drying oven is not by definition fuel combustion emission units.

b. The B stage drying oven on the affected coating line is 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 3 stage drying oven is not by definition fuel combustion emission units.

c. The affected coating line is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

d. No owner or operator of a coating line subject to the limitations of 35 IAC 218.204 is required to meet the limitations of 35 IAC 218.301 or 218.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

7.2.5 Operational and Production Limits and Work Practices

a. The afterburner shall be in operation at all time when any of the associated emission units are in operation and emitting air contaminants

b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation of the affected coating line.

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

d. The affected coating line shall only be operated with natural gas as the fuel in the 3 stage drying oven.

7.2.6 Emission Limitations

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

a. i. Emissions and operation of Roll Coater Glue Line I shall not exceed the following limits:

Material	Material Usage (lb/day)	Material Usage (T/yr)	VOM Content (% by Wt)	VOM Emissions (lb/day)	VOM Emissions (T/yr)
Glue	24.0	4.38	100	4.56	0.84
Alcohol	40.8	7.45	100	7.76	1.43
				Total	2.27

These limits are based on the maximum quantities of glue and alcohol consumed and compliance with 35 IAC 218.207(b)(1). The limits on the glue and alcohol consumed are the product of the maximum hourly consumption rate and the maximum operating hours (24 hours/day and 8,760 hours/year).

ii. The above limitations were established in Construction Permit 96100097, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major

modification pursuant to Title I of the CAA, specifically 35 IAC Part 203.[T1]

b. i. This permit is issued based on negligible emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) from the roll coater B Stage Oven. For this purpose, emissions of each contaminant shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr.

ii. The above limitations were established in Construction Permit 96100097, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.[T1]

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

7.2.7 Testing Requirements

a. The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test method and procedures specified in 35 IAC 218.105 to establish the records required under 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 7.2.9(f) directly reflect the application of such material and separately account for any additions of solvent.

c. Upon reasonable request by the Illinois EPA, pursuant to 35 IAC 218.211(e)(1), the owner or operator of the subject coating line shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with 35 IAC 218.207.

7.2.8 Monitoring Requirements

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)].

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating line 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. Records of the testing of VOM content of coatings and cleaning solvents pursuant to Condition 7.2.7, 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. Records of the testing of the efficiency of each capture system and control device pursuant to Condition 7.2.7(c), which include the following [Section 39.5(7)(e) of the Act]:

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

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

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

c. Pursuant to 35 IAC 218.211(e)(2), the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

i. Control device monitoring data;

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source; and

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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. Records of the coating usage for the affected coating line, gal/mo and gal/yr;

f. The VOM content of coatings, % by Wt;

g. Density of coatings, lb/gal;

h. The solvent usage for the affected coating line, gal/mo and gal/yr;

i. Density of solvent, lb/gal;

j. Records of the fuel usage for the affected coating line, Mft^3/mo and Mft^3/yr;

k. The aggregate monthly and annual VOM emissions from the affected coating line based on the coating and solvent usage and the afterburner efficiency, with supporting calculations; and

l. The monthly and aggregate annual CO, NO_x, PM, SO_2, and VOM emissions from the roll coater B Stage Oven shall be maintained, based on fuel usage and the applicable emission factors, with supporting calculations.

7.2.10 Reporting Requirements

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

a. Any record showing violation of Condition 7.2.3(e) (see also 35 IAC 218.207) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation [35 IAC 218.211(e)(3)(A)].

b. Emissions of VOM in excess of the limits in Condition 7.2.6(a) based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

c. Emissions of CO and/or NO_x in excess of the limits in Condition 7.2.6(b) 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(c) and (d) is assumed to be achieved by the work-practices inherent in operation of a natural gas-fired drying oven.

b. To determine compliance with Conditions 5.5.1 and 7.2.6(a), VOM emissions from the affected coating line shall be calculated based on the following:

VOM (lb) = (Coating Usage, gal) x (Coating Density, lb/gal) x (VOM Content of Coating, % by Wt) x [1 - (Afterburner Efficiency* (%)/100)] + (Cleaning Solvent Usage, gal) x (Solvent Density, lb/gal) x [1 - (Afterburner Efficiency* (%)/100)]

*As specified by manufacturer or vendor of the afterburner or by testing pursuant to Condition 7.2.7

c. To determine compliance with Condition 7.2.6(b), fuel combustion emissions from the roll coater B Stage Oven shall be calculated based on the following emission factors:

Pollutant	Emission Factor (lb/Mft^3)
CO	84
NO_x	100
PM	7.6
SO_2	0.6
VOM	5.5

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

Drying Oven Emissions (lb) = (Natural Gas Consumed, Mft^3) x (The Appropriate Emission Factor, lb/Mft^3)

7.3 Units CPF1, CPF2, & CPF3 Controlled Pyrolysis Furnaces

7.3.1 Description

Three pyrolysis furnaces are used to remove cured glue from hangers, which convey the steel plates through the glue dip tanks, using pyrolysis and heat. These are highly specialized ovens typically operating at 800°F. The cleaning process carried out by each furnace consists of heating the metal parts up to the process temperature and maintaining this temperature long enough to burn the glue from the hangers. As the furnace temperature rises above 600 - 700°F, the heat vaporizes (thermally decomposes) the glue residue to smoke and other volatile gases. The smoke and gases created by vaporization of the glue are drawn through the internal afterburner of each furnace.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
CPF1	Pollution Control Products Co. Model #27A Controlled Pyrolysis Cleaning Furnace (Controlled Pyrolysis Furnace 1)	Internal Afterburner
CPF2	Pollution Control Products Company Model PTR-340 Controlled Pyrolysis Cleaning Furnace (Controlled Pyrolysis Furnace 2)	Internal Afterburner
CPF3	Pollution Control Products Co. Model PRC 340 Controlled Pyrolysis Cleaning Furnace (Controlled Pyrolysis Furnace 3)	Internal Afterburner

7.3.3 Applicability Provisions and Applicable Regulations

a. Controlled Pyrolysis Furnaces #1, 2, and 3 are "affected pyrolysis furnaces" for the purpose of these unit-specific conditions.

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

c. The affected pyrolysis furnaces are subject to 35 IAC 212.321(a), which provides that:

   i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission

unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

ii. Because the expected process weight rate for each affected pyrolysis furnaces is less than 100 pounds per hour, combined, the allowable PM emission rate for each affected pyrolysis furnace set by 35 IAC 212.321 is 0.55 pounds per hour.

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm [35 IAC 214.301].

e. The affected pyrolysis furnaces are 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 7.3.3(e)(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 7.3.3(e)(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)].

7.3.4 Non-Applicability of Regulations of Concern

a. The affected pyrolysis furnaces are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the actual heat input of this unit is less than 2.9 MW (10 mmBtu/hr)

and the affected pyrolysis furnaces are not by definition a fuel combustion emission units.

b. The affected pyrolysis furnaces are not subject to 35 IAC 216.141, Emissions of Carbon Monoxide from Incinerators, because an affected pyrolysis furnace is not by definition an incinerator.

c. The affected pyrolysis furnaces are not subject to 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Sources, because the actual heat input of this unit is less than 73.2 MW (250 mmBtu/hr) and the affected pyrolysis furnaces are not by definition fuel combustion emission units.

d. The affected pyrolysis furnaces are not subject to 35 IAC 212.181(d), Particulate Matter Emissions from Incinerators, because an affected pyrolysis furnace is not by definition an incinerator.

e. The affected pyrolysis furnaces are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

7.3.5 Operational and Production Limits and Work Practices

a. Material insulated with polyvinyl chloride or asbestos, or scrap containing the fuming metals tin, zinc, or lead shall not be charged to the affected pyrolysis furnaces.

b. The afterburner combustion chamber of each affected pyrolysis furnace shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400^{o}F in the absence of a compliance test. This temperature shall be maintained during operation of the affected pyrolysis furnaces.

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

7.3.6 Emission Limitations

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

a. i. This permit is issued based on negligible emissions of particulate matter (PM) and carbon monoxide (CO) from Controlled Pyrolysis Furnace 2. For this purpose, emissions of each contaminant shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr.

ii. Only adhesive covered racks shall be charged to Controlled Pyrolysis Furnace 2 at a rate not to exceed 50 pounds of adhesive per hour.

iii. The above limitations were established in Construction Permit 89060023, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.[T1]

b. i. This permit is issued based on negligible emissions of particulate matter (PM) and carbon monoxide (CO) from Controlled Pyrolysis Furnace 3. For this purpose, emissions of each contaminant shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr.

ii. The above limitations were established in Construction Permit 96040009, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.[T1]

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

7.3.7 Testing Requirements

a. 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)].

b. 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 7.3.7(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 7.3.7(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)].

7.3.8 Monitoring Requirements

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)].

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 pyrolysis furnaces to demonstrate compliance with Conditions 5.5.1, 7.3.3, 7.3.5, and 7.3.6 pursuant to Section 39.5(7)(b) of the Act:

a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) 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. Records of equipment operation including the temperature of the afterburner combustion chamber of each affected pyrolysis furnace during the time of combustion;

c. Records addressing use of good operating practices for the afterburners:

i. Records for periodic inspection of the afterburners 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. The amount and type of material introduced to the affected pyrolysis furnaces, tons/mo and tons/yr;

e. Natural gas usage for the affected pyrolysis furnaces, Mft^3/mo and Mft^3/yr;

f. The operating schedules of each affected pyrolysis furnace;

g. Monthly and aggregate annual PM and VOM emissions from the affected pyrolysis furnaces based on the operating schedule and the typical hourly emission rate, with supporting calculations; and

h. Monthly and aggregate annual CO, NO_x, and SO_2 emissions from the affected pyrolysis furnaces shall be maintained, based on fuel usage, the amount and type of material processed, and the applicable emission factors, with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the control and operating 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 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 7.3.7(a) (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].

b. Continued operation of an affected pyrolysis furnace with defects in an afterburner that may result in emissions of CO, PM, or VOM in excess of the allowable limits specified in Conditions 7.3.3 and/or 7.3.6 within 30 days of such an occurrence;

c. Any occurrence when the affected pyrolysis furnaces was not operated in compliance with the requirements of Condition 7.3.5, with date, description, and explanation; and

d. Any occurrence when the monitoring system required by Condition 7.3.8 was not in service prior to initially charging material to the affected pyrolysis furnaces.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

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

a. Compliance with Conditions 7.3.3(c) and (e) is assured to be achieved by proper operation of the afterburners, as addressed by Condition 7.3.5.

b. Compliance with Condition 7.3.3(d) is assured to be achieved by the work-practices inherent in operation of a natural gas-fired burn-off oven.

c. To determine compliance with Conditions 5.5.1 and 7.3.6, emissions of PM and VOM from each affected pyrolysis furnace shall be determined based on hourly emission rates of 0.0267 lb/hr and 0.0348 lb/hr, respectively, which are the emission rates determined from the most recent stack testing.

d. To determine compliance with Condition 7.3.6, fuel combustion emissions from the affected pyrolysis furnaces shall be calculated based on the following emission factors:

Pollutant	Emission Factor (lb/Mft^3)
CO	84
NO_x	100
SO_2	0.6

These are the emission factors from 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.

Pyrolysis Furnace Emissions (lb) = (Natural Gas Consumed, Mft^3) x (The Appropriate Emission Factor, lb/Mft^3)

7.4 Unit BLU SURF Paper Gluing and Curing Process
Control BLU SURF Catalytic Oxidizer

7.4.1 Description

The Blu Surf Line applies and cures glue to friction material, which is than blanked into specific shapes and bonded to a steel backing. The final product is a component used in an automatic transmission. A curtain coater (waterfall) applies glue to the friction material, which is fed as sheets onto a belt that passes the sheets under the curtain of glue. The glue is continuously recirculated through the application system, which consists of a glue mixing tank, glue pump and filter, and the curtain coater head. Once through the curtain coater, the sheets are fed to the first of three conveyors and oven zones. This is the flash-off oven, where essentially all of the glue's solvent is dried from the glue film. The sheet travels next to the pre-cure oven, which "B" stages the glue to prevent the finished sheets from sticking together, and to reduce the final bonding time for material when bonded to the metal. The third zone cools the sheet using outside air. The sheets are then stacked on pallets and transferred for storage or shipment. Pollutants of concern from the gluing pre-curing process are VOM and HAPs that are emitted during the drying of the glue film. The emissions from the glue room and flash-off oven are exhausted to a catalytic oxidizer. The emissions from the pre-cure oven and cooling zones are uncontrolled.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
BLU SURF	Paper Gluing and Curing Process (Blu Surf)	BLU SURF Catalytic Oxidizer

7.4.3 Applicability Provisions and Applicable Regulations

a. The Paper Gluing and Curing Process (Blu Surf) is an "affected coating line" for the purpose of these unit-specific conditions.

b. The affected coating line is subject to the emission limits identified in Condition 5.2.2.

c. The affected coating line is subject to 35 IAC 212.321(a), which provides that:

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

ii. Because the expected process weight rate for the affected coating line is 232.20 pounds per hour, the allowable PM emission rate for the affected coating line set by 35 IAC 212.321 is 0.81 pounds per hour.

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].

e. The affected coating line is subject to 35 IAC 218 Subpart F, which provides that:

i. Except as provided in Condition 7.4.3(e)(ii) (35 IAC 218.207), 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 Paper 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 [35 IAC 218.204(c)]:

kg/l	lb/gal
0.28	2.3

ii. Any owner or operator of a coating line subject to 35 IAC 218.204 may comply with 35 IAC 218.207, rather than Condition 7.4.3(e)(i) (see also 35 IAC 218.204), if a capture system and control device are operated at all times

the coating line is in operation and the owner or operator demonstrates compliance with Condition 7.4.3(e)(iii) (see also 35 IAC 218.207(c)) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Condition 7.4.7 (see also 35 IAC 218.105) and the recordkeeping and reporting requirements specified in Conditions 7.4.9 and 7.4.10 (see also 35 IAC 218.211(e)); and the control device is equipped with the applicable monitoring equipment specified in Condition 7.4.8 (see also 35 IAC 218.105(d)) and the monitoring equipment is install, calibrated, operated and maintained according to vendor specifications at all times the control device is in use [35 IAC 218.207(a)].

iii. No owner or operator of a coating line subject to the emission limitations in Condition 7.4.3(e)(i) (35 IAC 218.204(j)(2)(B)) and equipped with a capture system and control device shall operate the affected coating line unless the coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency [35 IAC 218.207(b)(i) and 218.207(c)].

7.4.4 Non-Applicability of Regulations of Concern

a. The flash-off and pre-cure ovens on the affected coating line 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 flash-off and pre-cure ovens are not by definition fuel combustion emission units.

b. The flash-off and pre-cure ovens on the affected coating line 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 flash-off and pre-cure ovens are not by definition fuel combustion emission units.

c. The affected coating line is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas,

because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

d. No owner or operator of a coating line subject to the limitations of 35 IAC 218.204 is required to meet the limitations of 35 IAC 218.301 or 218.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

7.4.5 Operational and Production Limits and Work Practices

a. The afterburner shall be in operation at all time when any of the associated emission units are in operation and emitting air contaminants.

b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400^{o}F in the absence of a compliance test. This temperature shall be maintained during operation of the affected coating line.

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

d. The affected coating line shall only be operated with natural gas as the fuel in the flash-off and pre-cure ovens.

7.4.6 Emission Limitations

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

a. i. Emissions of volatile organic material from the Blu Surf Glue Line shall not exceed 85.5 tons/year. This limit is based on the maximum emission rate (28.5 lb/hr), the maximum glue application rate (380 lb/hr; containing 75% solvent) and the maximum hours of operation (6,000 hr/yr).

ii. The above limitations were established in Construction Permit 81080073, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does

not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [T1]

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

7.4.7 Testing Requirements

a. The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test method and procedures specified in 35 IAC 218.105 to establish the records required under 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 7.4.9(f) directly reflect the application of such material and separately account for any additions of solvent.

c. Upon reasonable request by the Illinois EPA, pursuant to 35 IAC 218.211(e)(1), the owner or operator of the subject coating line shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with 35 IAC 218.207.

7.4.8 Monitoring Requirements

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 has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust [35 IAC 218.105(d)(2)(A)(ii)].

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating line to demonstrate compliance with Conditions 5.5.1, 7.4.3, 7.4.5, and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

a. Records of the testing of VOM content of coatings and cleaning solvents pursuant to Condition 7.4.7, 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. Records of the testing of the efficiency of each capture system and control device pursuant to Condition 7.4.7(c), which include the following [Section 39.5(7)(e) of the Act]:

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

   ii. The date(s) analyses were performed;

   iii. The company or entity that performed the analyses;

   iv. The analytical techniques or methods used;

   v. The results of such analyses; and

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

c. Pursuant to 35 IAC 218.211(e)(2), the owner or operator of a subject coating line shall collect and

record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

i. Control device monitoring data;

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source; and

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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. Records of the coating usage for the affected coating line, gal/mo and gal/yr;

f. The VOM content of coatings, % by Wt;

g. Density of coatings, lb/gal;

h. The solvent usage for the affected coating line, gal/mo and gal/yr;

i. Density of solvent, lb/gal;

j. The weight of paper used on the affected coating line; lb/mo and ton/yr;

k. The operating schedule of the affected coating line;

l. Natural gas usage of the flash-off and pre-cure ovens associated with the affected coating line, Mft^3/mo and Mft^3/yr;

m. The aggregate monthly and annual VOM emissions from the affected coating line based on the coating and

solvent usage and the afterburner efficiency, with supporting calculations; and

n. Records of the monthly and aggregate annual NO_x, PM, SO_2, and VOM emissions from the combustion of natural gas in the flash-off and pre-cure ovens associated with the affected coating line shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.4.10 Reporting Requirements

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

a. Any record showing violation of Condition 7.4.3(e) (see also 35 IAC 218.207) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation [35 IAC 218.211(e)(3)(A)].

b. Emissions of VOM in excess of the limits in Condition 7.4.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

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

a. Compliance with Conditions 7.4.3(c) and (d) is assumed to be achieved by the work-practices inherent in operation of natural gas-fired flash-off and pre-cure ovens.

b. To determine compliance with Conditions 5.5.1 and 7.4.6, VOM emissions from the affected coating line shall be calculated based on the following:

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

[1 - (Afterburner Efficiency* (%)/100)] + (Cleaning Solvent Usage, gal) x (Solvent Density, lb/gal) x [1 - (Afterburner Efficiency* (%)/100)]

*As specified by manufacturer or vendor of the afterburner or by testing pursuant to Condition 7.4.7

c. To determine compliance with Condition 5.5.1, emissions from the combustion of natural gas from the flash-off and pre-cure ovens associated with the affected coating line shall be calculated based on the following emission factors:

Pollutant	Emission Factor (lb/Mft^3)
NO_x	100
PM	7.6
SO_2	0.6
VOM	5.5

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

Flash-Off and Pre-Cure Oven Emissions (lb) = (Natural Gas Consumed, Mft^3) x (The Appropriate Emission Factor, lb/Mft^3)

7.5 Unit ROSS I Saturating, Pre-Curing, & Curing Line Control ROSS I Thermal Oxidizer

7.5.1 Description

The Ross I production line is a resin treater that impregnates a base web with a thermoset resin to make it durable for the conditions that exist in automatic transmissions. The base web is coil fed into the Ross I treater where it is saturated with the resin, and then progressively dried and precured in a forced hot air flotation oven. The base web is then either recoiled, or cut to length into sheets. The resin-impregnated material is blanked into shapes appropriate for friction components, such as band liners or friction plate facings. The blanked part is bonded to steel and then fabricated into the final component. VOM emissions from the saturation, drying, and pre-curing processes are exhausted to a thermal oxidizer. Combustion of natural gas for the flash-off and pre-cure ovens occurs in the afterburner combustion chamber, which heats primary and secondary heat exchangers that then heat the ovens within the system.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ROSS I	Midland Ross Saturating, Pre-Curing, and Curing Line (Ross I)	ROSS I Thermal Oxidizer

7.5.3 Applicability Provisions and Applicable Regulations

a. The Saturating, Pre-Curing, and Curing Line (Ross I) is an "affected coating line" for the purpose of these unit-specific conditions.

b. The affected coating line is subject to the emission limits identified in Condition 5.2.2.

c. The affected coating line is subject to 35 IAC 212.321(a), which provides that:

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

exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

ii. Because the expected process weight rate for the affected coating line is 830 pounds per hour, the allowable PM emission rate for the affected coating line set by 35 IAC 212.321 is 1.59 pounds per hour.

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].

e. The affected coating line is subject to 35 IAC 218 Subpart F, which provides that:

i. Except as provided in Condition 7.5.3(e)(ii) (35 IAC 218.207), 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 Paper 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 [35 IAC 218.204(c)]:

kg/l	lb/gal
0.28	2.3

ii. Any owner or operator of a coating line subject to 35 IAC 218.204 may comply with 35 IAC 218.207, rather than Condition 7.5.3(e)(i) (see also 35 IAC 218.204), if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with Condition 7.5.3(e)(iii) (see also 35 IAC 218.207(c)) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Condition 7.5.7 (see also 35 IAC 218.105) and the recordkeeping and reporting

requirements specified in Conditions 7.5.9 and 7.5.10 (see also 35 IAC 218.211(e)); and the control device is equipped with the applicable monitoring equipment specified in Condition 7.5.8 (see also 35 IAC 218.105(d)) and the monitoring equipment is install, calibrated, operated and maintained according to vendor specifications at all times the control device is in use [35 IAC 218.207(a)].

iii. No owner or operator of a coating line subject to the emission limitations in Condition 7.5.3(e)(i) (35 IAC 218.204(j)(2)(B)) and equipped with a capture system and control device shall operate the affected coating line unless the coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency [35 IAC 218.207(b)(i) and 218.207(c)].

7.5.4 Non-Applicability of Regulations of Concern

a. The thermal oxidizer on the affected coating line is not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the thermal oxidizer is not by definition a fuel combustion emission unit.

b. The thermal oxidizer on the affected coating line 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 unit is less than 73.2 MW (250 mmBtu/hr) and the thermal oxidizer is not by definition a fuel combustion emission unit.

c. The affected coating line is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

d. No owner or operator of a coating line subject to the limitations of 35 IAC 218.204 is required to meet the limitations of 35 IAC 218.301 or 218.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

7.5.5 Operational and Production Limits and Work Practices

a. The afterburner shall be in operation at all time when any of the associated emission units are in operation and emitting air contaminants.

b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400^{o}F in the absence of a compliance test. This temperature shall be maintained during operation of the affected coating line.

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

d. The affected coating line shall only be operated with natural gas as the fuel in the thermal oxidizer, which is also used to heat the flash-off and pre-curing ovens.

7.5.6 Emission Limitations

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

a. The emissions of VOM from the coil to coil saturating pre-curing and curing production line shall not exceed either:

i. An average rate of 15.9 lb/hr and not occur for more than 6,000 hours per year; or

ii. A total of 47.7 tons per year.

b. The above limitations were established in Construction Permit C909023, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.[T1]

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current

month plus the preceding 11 months (running 12 month total).

7.5.7 Testing Requirements

a. The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test method and procedures specified in 35 IAC 218.105 to establish the records required under 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 7.5.9(f) directly reflect the application of such material and separately account for any additions of solvent.

c. Upon reasonable request by the Illinois EPA, pursuant to 35 IAC 218.211(e)(1), the owner or operator of the subject coating line shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with 35 IAC 218.207.

7.5.8 Monitoring Requirements

An owner or operator that uses an afterburner or 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)].

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating line to demonstrate compliance with Conditions 5.5.1, 7.5.3, 7.5.5, and 7.5.6, 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 7.5.7, 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. Records of the testing of the efficiency of each capture system and control device pursuant to Condition 7.5.7(c), which include the following [Section 39.5(7)(e) of the Act]:

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

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

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

c. Pursuant to 35 IAC 218.211(e)(2), the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

i. Control device monitoring data;

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source; and

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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. Records of the coating usage for the affected coating line, gal/mo and gal/yr;

f. The VOM content of coatings, % by Wt;

g. Density of coatings, lb/gal;

h. The solvent usage for the affected coating line, gal/mo and gal/yr;

i. Density of solvent, lb/gal;

k. Natural gas usage of the thermal oxidizer associated with the affected coating line, Mft^3/mo and Mft^3/yr;

l. The monthly and aggregate annual VOM emissions from the affected coating line based on the coating and solvent usage and the afterburner efficiency, with supporting calculations; and

m. Records of the monthly and aggregate annual NO_x, PM, SO_2, and VOM emissions from the combustion of natural gas in the thermal oxidizer associated with the affected coating line shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of 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. Any record showing violation of Condition 7.5.3(e) (see also 35 IAC 218.207) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation [35 IAC 218.211(e)(3)(A)].

b. Emissions of VOM in excess of the limits in Condition 7.5.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

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

a. Compliance with Conditions 7.5.3(c) and (d) is assumed to be achieved by the work-practices inherent in operation of natural gas-fired flash-off and pre-curing ovens.

b. To determine compliance with Condition 5.5.1, VOM emissions from the affected coating lines shall be calculated based on the following:

VOM (lb) = (Coating Usage, gal) x (Coating Density, lb/gal) x (VOM Content of Coating, % by Wt) x [1 - (Afterburner Efficiency* (%)/100)] + (Cleaning Solvent Usage, gal) x (Solvent Density, lb/gal) x [1 - (Afterburner Efficiency* (%)/100)]

*As specified by manufacturer or vendor of the afterburner or by testing pursuant to Condition 7.5.7

c. To determine compliance with Condition 5.5.1, emissions from the combustion of natural gas from the

thermal oxidizer associated with the affected coating line shall be calculated based on the following emission factors:

Pollutant	Emission Factor (lb/Mft^3)
NO_x	100
PM	7.6
SO_2	0.6
VOM	5.5

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

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

7.6 Unit ROSS II Saturating, Pre-Curing, & Curing Line
Control ROSS II Thermal Oxidizer

7.6.1 Description

The Ross II production line is a resin treater that impregnates a base web with a thermoset resin to make it durable for the conditions that exist in automatic transmissions. The base web is coil fed into the Ross II treater where it is saturated with the resin, and then progressively dried and precured in a forced air flotation oven. The base web is then recoiled. The resin-impregnated material is blanked into shapes appropriate for friction components, such as band liners or friction plate facings. The blanked part is bonded to steel and then fabricated into the final component. VOM emissions from the saturation, drying, and pre-curing processes are exhausted to a thermal oxidizer. Combustion of natural gas for the flash-off and pre-cure ovens occurs in the afterburner combustion chamber, which heats primary and secondary heat exchangers that then heat the ovens within the system.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ROSS II	Ross-Waldron Model L5093/5094 Saturating, Pre-Curing, & Curing Line (Ross II)	ROSS II Thermal Oxidizer

7.6.3 Applicability Provisions and Applicable Regulations

a. The Saturating, Pre-Curing, and Curing Line (Ross II) is an "affected coating line" for the purpose of these unit-specific conditions.

b. The affected coating line is subject to the emission limits identified in Condition 5.2.2.

c. The affected coating line is subject to 35 IAC 212.321(a), which provides that:

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

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

ii. Because the expected process weight rate for the affected coating line is 3,019 pounds per hour, the allowable PM emission rate for the affected coating line set by 35 IAC 212.321 is 3.17 pounds per hour.

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].

e. The affected coating line is subject to 35 IAC 218 Subpart F, which provides that:

i. Except as provided in Condition 7.6.3(e)(ii) (35 IAC 218.207), 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 Paper 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 [35 IAC 218.204(c)]:

kg/l	lb/gal
0.28	2.3

ii. Any owner or operator of a coating line subject to 35 IAC 218.204 may comply with 35 IAC 218.207, rather than Condition 7.6.3(e)(i) (see also 35 IAC 218.204), if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with Condition 7.6.3(e)(iii) (see also 35 IAC 218.207(c)) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in Condition 7.6.7 (see also 35 IAC

218.105) and the recordkeeping and reporting requirements specified in Conditions 7.6.9 and 7.6.10 (see also 35 IAC 218.211(e)); and the control device is equipped with the applicable monitoring equipment specified in Condition 7.6.8 (see also 35 IAC 218.105(d)) and the monitoring equipment is install, calibrated, operated and maintained according to vendor specifications at all times the control device is in use [35 IAC 218.207(a)].

iii. No owner or operator of a coating line subject to the emission limitations in Condition 7.6.3(e)(i) (35 IAC 218.204(j)(2)(B)) and equipped with a capture system and control device shall operate the affected coating line unless the coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency [35 IAC 218.207(b)(i) and 218.207(c)].

7.6.4 Non-Applicability of Regulations of Concern

a. The thermal oxidizer on the affected coating line is not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the thermal oxidizer is not by definition a fuel combustion emission unit.

b. The thermal oxidizer on the affected coating line 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 unit is less than 73.2 MW (250 mmBtu/hr) and the thermal oxidizer is not by definition a fuel combustion emission unit.

c. The affected coating line is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

d. No owner or operator of a coating line subject to the limitations of 35 IAC 218.204 is required to meet the limitations of 35 IAC 218.301 or 218.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 218.204 [35 IAC 218.209].

7.6.5 Operational and Production Limits and Work Practices

a. The afterburner shall be in operation at all time when any of the associated emission units are in operation and emitting air contaminants.

b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400^{o}F in the absence of a compliance test. This temperature shall be maintained during operation of the affected coating line.

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

d. The affected coating line shall only be operated with natural gas as the fuel in the thermal oxidizer, which is also used to heat the flash-off and pre-curing ovens.

7.6.6 Emission Limitations

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

a. Annual emissions shall not exceed the amounts specified in the Table below:

	Annual Emissions (Tons/year)				
Emission Unit	PM	SO_2	NO_x	VOM	CO
Fuel Combustion	0.96	0.06	16.66	0.28	1.63
Saturant Coating	--	--	--	89.00	--
Total	0.96	0.06	16.66	89.28	1.63

b. These limits are based on standard emission factors, firing of the oven and afterburners at the maximum firing rate (32 mmBtu/hr) on natural gas, and the maximum hours of operation (6,000 hours/year). The limit on emissions of volatile organic material from the saturator is based on operation of the Midland Ross II Paper Saturating Line at the maximum uncontrolled emission rate, with a 98% efficient afterburner at the maximum operating hours.

c. The above limitations were established in Construction Permit 84050074, pursuant to 35 IAC Part 203 and 40 CFR 52.21, Prevention of Significant Deterioration

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

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

7.6.7 Testing Requirements

a. The VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test method and procedures specified in 35 IAC 218.105 to establish the records required under 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 7.6.9(f) directly reflect the application of such material and separately account for any additions of solvent.

c. Upon reasonable request by the Illinois EPA, pursuant to 35 IAC 218.211(e)(1), the owner or operator of the subject coating line shall perform all tests and submit to the Illinois EPA the results of all tests and calculations necessary to demonstrate that the subject coating line will be in compliance with 35 IAC 218.207.

7.6.8 Monitoring Requirements

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)].

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating line to demonstrate compliance with Conditions 5.5.1, 7.6.3, 7.6.5, and 7.6.6, 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 7.6.7, 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. Records of the testing of the efficiency of each capture system and control device pursuant to Condition 7.6.7(c), which include the following [Section 39.5(7)(e) of the Act]:

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

    ii. The date(s) analyses were performed;

    iii. The company or entity that performed the analyses;

    iv. The analytical techniques or methods used;

    v. The results of such analyses; and

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

c. Pursuant to 35 IAC 218.211(e)(2), the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

    i. Control device monitoring data;

    ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source; and

    iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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. Records of the coating usage for the affected coating line, gal/mo and gal/yr;

f. The VOM content of coatings, % by Wt;

g. Density of coatings, lb/gal;

h. The solvent usage for the affected coating line, gal/mo and gal/yr;

i. Density of solvent, lb/gal;

j. Records of the fuel usage for the thermal oxidizer on the affected coating line, Mft^3/mo and Mft^3/yr;

k. The operating schedule of the affected coating line;

l. The monthly and aggregate annual VOM emissions from the affected coating line based on the coating and

solvent usage and the afterburner efficiency, with supporting calculations; and

m. The monthly and aggregate annual CO, NO_x, PM, SO_2, and VOM emissions from the thermal oxidizer on the affected coating line shall be maintained, based on fuel usage and the applicable emission factors, with supporting calculations.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of 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. Any record showing violation of Condition 7.6.3(e) (see also 35 IAC 218.207) shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation [35 IAC 218.211(e)(3)(A)].

b. Emissions of CO, NO_x, PM, SO_2, and/or VOM in excess of the limits specified in Condition 7.6.6 within 30 days of such an occurrence

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

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

a. Compliance with Conditions 7.6.3(c) and (d) is assumed to be achieved by the work-practices inherent in operation of natural gas-fired flash-off and pre-curing ovens.

b. To determine compliance with Conditions 5.5.1 and 7.6.6, VOM emissions from the affected coating lines shall be calculated based on the following:

VOM (lb) = (Coating Usage, gal) x (Coating Density, lb/gal) x (VOM Content of Coating, % by Wt) x [1 - (Afterburner Efficiency* (%)/100)] + (Cleaning Solvent Usage, gal) x (Solvent

Density, lb/gal) x [1 - (Afterburner Efficiency* (%)/100)]

*As specified by manufacturer or vendor of the afterburner or by testing pursuant to Condition 7.6.7

c. To determine compliance with Conditions 5.5.1 and 7.6.6, fuel combustion emissions from the thermal oxidizer on the affected coating lines shall be calculated based on the following emission factors:

Pollutant	Emission Factor (lb/Mft^3)
CO	84
NO_x	100
PM	7.6
SO_2	0.6
VOM	5.5

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

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

7.7 Units PM Paper Machining Process Controls PM Cyclones

7.7.1 Description

Paper machining is performed on saturated paper by several processes. The processes include slitting, blanking, sanding, sizing, and grooving. The emissions of concern from paper machining is paper dust (particulate matter). Cyclones are used to control the paper dust emissions. Jumbo rolls of saturated paper are slit into smaller rolls then both paper rolls and paper sheets are fed into stamping machines where paper is "blanked" into circles for friction plates. After bonding the paper circles to steel cores to create a friction plate, the plates are sized and sanded to specific dimensions, and grooves are cut into the paper surfaces.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
PM	Paper Machining Process (Slitting, Blanking, Sanding, Sizing, and Grooving)	Two Cyclones

7.7.3 Applicability Provisions and Applicable Regulations

a. The Paper Machining Process is an "affected paper process" for purposes of these unit-specific conditions.

b. The Paper Machining Process is subject to the emission limits identified in Condition 5.2.2.

c. The slitting, blanking, sizing, and grooving operations for the affected paper process is subject to 35 IAC 212.322(a), which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (see also Attachment 2) [35 IAC 212.322(a)].

ii. Because the expected process weight rate for the slitting, blanking, sizing, and grooving operations for the affected paper process is 2,396 pounds per hour, the allowable PM emission rate for the slitting, blanking, sizing, and grooving operations for the affected paper process set by 35 IAC 212.322 is 4.63 pounds per hour.

7.7.4 Non-Applicability of Regulations of Concern

a. Pursuant to 35 IAC 212.681(a), 35 IAC 212.321, Particulate Matter from Process Emission Units, shall not apply to grinding or sanding.

b. The affected paper process is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

7.7.5 Operational and Production Limits and Work Practices

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

7.7.6 Emission Limitations

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

7.7.7 Testing Requirements

None

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

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

a. Records addressing use of good operating practices for the cyclones:

i. Records for periodic inspection of the cyclones with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

b. The operating schedule of the affected paper process; and

c. The aggregate monthly and annual PM emissions from the affected paper process based on the operating schedule and the typical hourly emission rate, with supporting calculations.

7.7.10 Reporting Requirements

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

Continued operation of the slitting, blanking, sizing, and grooving operations for the affected paper process with a defect in the cyclones that may result in emissions of particulate matter in excess of limits in Condition 7.7.3(c) within 30 days of such an occurrence.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

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

a. Compliance with Condition 7.7.3(c) is assumed to be achieved by proper operation of the baghouses, as addressed by Condition 7.7.5.

b. To determine compliance with Condition 5.5.1, emissions from the affected paper process shall be calculated based on the following:

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

*As specified by manufacturer or vendor of the cyclones.

7.8 Unit VIA Videojet Ink Application

7.8.1 Description

Videojet ink and makeup fluid are used throughout the source for automated printing of parts and saturated paper. The printing process involves primarily spraying a part number onto the parts of paper. In addition to the primary spraying equipment, a small flexographic printing press is also used to apply part numbers.

7.8.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
VIA	Videojet Ink Application	None

7.8.3 Applicability Provisions and Applicable Regulations

a. The Videojet Ink Application is an "affected printing line" for the purpose of these unit-specific conditions.

b. The affected printing line is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 9 and 63, Subparts A and KK, because the source is a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated. The Illinois EPA administers the NESHAP for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

c. 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 Paper Coatings. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator. 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 [35 IAC 218.204(c)]:

kg/l	lb/gal
0.28	2.3

7.8.4 Non-Applicability of Regulations of Concern

a. The affected printing lines are not subject to 35 IAC 218 Subpart H: Printing and Publishing because:

i. Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing line(s) (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)) at the source never exceed 90.7 Mg (100 tons) per calendar year and the flexographic and rotogravure printing line(s) (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)) at the source have been limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit; and

ii. The flexographic and rotogravure printing line(s) (including solvents used for cleanup operations associated with flexographic and rotogravure printing line(s)) at the source do not have a potential to emit 22.7 Mg (25 tons) or more of VOM per year.

b. 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].

7.8.5 Operational and Production Limits and Work Practices

Pursuant to 40 CFR 63.821(b), each product and packaging rotogravure or wide-web flexographic printing affected source at a facility that is a major source of HAP, as defined in 40 CFR 63.2, that complies with the criteria of Conditions 7.8.5(a) or (b) (see also 40 CFR 63.821(b)(1) and 63.821(b)(2)) on and after May 30, 1999 (the applicable compliance date as specified in 40 CFR 63.826) is subject only to the requirements of Conditions 7.8.9(a) and 5.7.4 (see also 40 CFR 63.829(e) and 63.830(b)(1)).

a. The owner or operator of the source applies no more than 500 kg per month, for every month, of inks, coatings, varnishes, adhesives, primers, solvents,

thinners, reducers, and other materials on product and packaging rotogravure or wide-web flexographic printing presses [40 CFR 63.821(b)(1)], or

b. The owner or operator of the source applies no more than 400 kg per month, for every month, of organic HAP on product and packaging rotogravure or wide-web flexographic printing presses [40 CFR 63.821(b)(2)].

c. This condition is being imposed at the request of the Permittee so that the source is only subject to the recordkeeping and reporting provisions of 40 CFR 63 Subpart KK - National Emission Standards for the Printing and Publishing Industry.

7.8.6 Emission Limitations

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

a. Emissions from the affected printing line shall not exceed 24.9 tons/year.

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 are being established in this permit. These limits ensure that the affected printing line is not subject to the control requirements of 35 IAC Part 218, Subpart H: Printing and Publishing.

7.8.7 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 7.8.9(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 7.8.9(c) directly reflect the application of such material and separately account for any additions of solvent.

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected printing line to demonstrate compliance with Conditions 5.5.1, 7.8.3, 7.8.5, and 7.8.6, pursuant to Section 39.5(7)(b) of the Act:

a. Pursuant to 40 CFR 63.829(e), the owner or operator of each facility which meets the limits and criteria of Conditions 5.4.1(a) and 7.8.5(a) (see also 40 CFR 63.821(b)(1)) shall maintain records as required in Condition 7.8.9(a)(i) (see also 40 CFR 63.829(e)(1)). The owner or operator of each facility which meets the limits and criteria of Conditions 5.4.1(b) and 7.8.5(b) (see also 40 CFR 63.821(b)(2)) shall maintain records as required in Condition 7.14.9(a)(ii) (see also 40 CFR 63.829(e)(2)). Owners or operators shall maintain these records for five years, and upon request, submit them to the Illinois EPA or the USEPA.

i. For each facility which meets the criteria of Conditions 5.4.1(a) and 7.8.5(a) (see also 63.821(b)(1)), the owner or operator shall maintain records of the total volume of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month [40 CFR 63.829(e)(1)].

ii. For each facility which meets the criteria of Conditions 5.4.1(b) and 7.8.5(b) (see also 63.821(b)(2)), the owner or operator shall maintain records of the total volume and organic HAP content of each material applied

on product and packaging rotogravure or wide-web flexographic printing presses during each month [40 CFR 63.829(e)(2)].

b. Records of the testing of VOM content of coatings, inks, and cleaning solvents pursuant to Condition 7.8.7, 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.

iv. Person performing analysis.

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 line and maintain the information at the source for a period of three years:

i. The name and identification number of each coating as applied on the affected coating line; and

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

d. Pursuant to 35 IAC 218.404(b)(2), any owner or operator of a printing line which is exempted from the limitations of 35 IAC 218.401 because of the criteria in Conditions 7.8.4(b) and 7.8.6(a) (see also 35 IAC 218.402) shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:

i. The name and identification number of each coating and ink as applied on each printing line [35 IAC 218.404(b)(2)(A)].

ii. The VOM content and the volume of each coating and ink as applied each year on each printing line [35 IAC 218.404(b)(2)(B)].

e. Records shall be maintained of the VOM content of each cleaning solvent used on the affected printing lines as follows:

i. The VOM content of these materials, lb VOM/gal with source of data, i.e., as determined from material safety data sheets, manufacturer specifications, process formulation data, and/or testing using USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A; and

ii. Records of material consumption shall be maintained for each cleaning solvent used on the affected printing line on a monthly basis.

f. Records of the ink and coating usage for the affected printing line, gal/mo and gal/yr;

g. The VOM content of inks and coatings, % by Wt;

h. Density of inks and coatings, lb/gal;

i. Records of the solvent usage for the affected printing line, gal/mo and gal/yr;

j. Density of solvent, lb/gal; and

k. The monthly and aggregate annual VOM emissions from the affected printing line based on the ink and solvent usage, with supporting calculations.

7.8.10 Reporting Requirements

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

a. Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.1.3(b) (see also 35 IAC 218.204) within 30 days following the occurrence of the violation.

b. Pursuant to 35 IAC 218.404(b)(3), Any owner or operator of a printing line which is exempted from the limitations of 35 IAC 218.401 because of the criteria in Conditions 7.1.4(c) and 7.1.6(a) (see also 218.402) shall notify the Illinois EPA of any record showing

that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.

c. Emissions of VOM in excess of the limits specified in Condition 7.8.6 within 30 days of such an occurrence.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and formulas listed below:

a. Pursuant to 35 IAC 218.404(b)(1)(B), calculations which demonstrate that total maximum theoretical emissions of VOM from all flexographic and rotogravure printing lines at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices. Total maximum theoretical emissions of VOM for a flexographic or rotogravure printing source is the sum of maximum theoretical emissions of VOM from each flexographic and rotogravure printing line at the source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year before the application of capture systems and control devices for each flexographic and rotogravure printing line at the source:

$E_p = A \times B + 1095 (C \times D \times F)$

where:

E_p = Total maximum theoretical emissions of VOM from one flexographic or rotogravure printing line in units of kg/yr (lb/yr);

A = Weight of VOM per volume of solids of the coating or ink with the highest VOM content as applied each year on the printing line in units of kg VOM/l (lb VOM/gal) of coating or ink solids;

B = Total volume of solids for all coatings and inks that can potentially be applied each year on the printing line in units of l/yr (gal/yr). The instrument and/or method by which the owner or operator accurately measured or calculated the volume of each coating and ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Illinois EPA;

C = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of kg/l (lb VOM/gal) of such material;

D = The greatest volume of cleanup material or solvent used in any 8-hour period and

F = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.

b. To determine compliance with Condition 5.5.1, emissions from the affected printing line shall be calculated based on the following:

Volatile Organic Material Emissions:

VOM (lb) = (Coating or Ink Usage, gal) x (Coating Density, lb/gal) x (VOM Content of Coating or Ink, lb/gal) + (Cleaning Solvent Usage, gal) x (Solvent Density, lb/gal)

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

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

This permit shield does not extend to applicable requirements which are promulgated after May 5, 1999 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

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

a. Describe the physical or operational change;

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

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

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

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

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

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

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

8.6.2 Test Notifications

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

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

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

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

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

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

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

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

8.6.3 Test Reports

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

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

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

c. The date any analyses were performed;

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

e. The test and analytical methodologies used;

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

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

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

8.6.4 Reporting Addresses

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

i. Illinois EPA - Air Compliance Section

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

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section (MC 11)

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

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)

Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

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

8.7 Obligation to comply with Title I requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

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

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

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

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

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

e. Obtain and remove samples of any discharge or emission of pollutants; and

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

9.4 Obligation to Comply With Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

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

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

a. The 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 19, 1972 [35 IAC 212.321(c)]:

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

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

10.2.1 Process Emission Units for Which Construction or Modification Commenced Prior to 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 process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(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 212.322(b)]:

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

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

i. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

10.3 Attachment 3 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