

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

3M Corporation
Attn: Mike Osborne
Building 42-2E-27
Post Office Box 33331
St. Paul, Minnesota 55133

<u>Application No.:</u> 95090129	<u>I.D. No.:</u> 031012AAR
<u>Applicant's Designation:</u>	<u>Date Received:</u> September 8, 1995
<u>Operation of:</u> Tape Manufacturing Plant	
<u>Date Issued:</u> September 29, 2000	<u>Expiration Date</u> ² : September 29, 2005
<u>Source Location:</u> 6850 South Harlem, Bedford Park, Cook County	
<u>Responsible Official:</u> John Houle, Plant Manager	

This permit is hereby granted to the above-designated Permittee to OPERATE a tape manufacturing plant, pursuant to the above referenced permit application and authority granted to the Illinois EPA pursuant to Section 39.5 of the Environmental Protection Act. This permit is subject to the conditions contained herein.

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

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

DES:DGP: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 CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

3M Company Tape Manufacturing Division
6850 South Harlem Avenue
Bedford Park, Illinois 60501
612/778-5830

I.D. No.: 031012AAR
Standard Industrial Classification: 2672, Coated and Laminated
Paper

1.2 Owner/Parent Company

3M Company ET & SS
Bldg 42-2E-27
Post Office Box 33331
St. Paul, Minnesota 55133

1.3 Operator

3M Company Tape Manufacturing Division
6850 South Harlem Avenue
Bedford Park, Illinois 60501

Steve Lorentz, EHS Manager
708/496-2994

1.4 General Source Description

The Tape Manufacturing Division of 3M Company manufactures tape by applying coatings to paper and plastic substrates. The coating lines emit VOM from the solvent in the coating. The VOM is controlled by afterburners (thermal oxidizers). In addition, the source stores solvents and mixes the solvents with rubber or resin to make much of the adhesive coatings used in the coating lines. Steam for process use is generated by three gas-fired boilers with fuel oil as a backup fuel.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
ATU	Allotment Trading Unit
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
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
CFR	Code of Federal Regulations
EMSA	Environmental Management System Agreement
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
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
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit with revisions made
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

None

- 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:

Emergency Diesel Generators
Waste Heat Boiler
Welding
Beringer Cleaner

- 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:

Extruders used for the extrusion of metals, minerals, plastics, rubber, or wood, excluding extruders used in the manufacture of polymers, provided that volatile organic materials or class I or II substances subject to the requirements of Title VI of the CAA are not used as foaming agents or release agents or were not used as foaming agents in the case of extruders processing scrap material [35 IAC 201.210(a)(5)].

Equipment used for the mixing and blending of materials at ambient temperature to make water based adhesives, provided each material mixed or blended contains less than 5% organic solvent by weight [35 IAC 201.210(a)(9)].

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)].

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

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)].

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 212.123 (Condition 5.2.2(a) - Opacity), and 35 IAC 212.301 (Condition 5.2.2(b) - Visible emissions at the property line), the Permittee shall comply with the following requirements as applicable.

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

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 35 IAC 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pound per hour if the unit's process weight rate is 100 pounds per hour or less.

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 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pound 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 ^a	Emission Control Equipment
1G	Tape Coating Line	Pre-1972	Afterburner
3G	Tape Coating Line	Pre-1972	Afterburner
4G	Tape Coating Line	Pre-1972	Afterburner
5G	Tape Coating Line	Pre-1972	Afterburner
6G	Tape Coating Line	1995**	Afterburner
2H	Tape Coating Line	Pre-1972	Afterburner
3H	Tape Coating Line	Pre-1972	Afterburner
4H	Tape Coating Line	Pre-1972	Afterburner
5H	Tape Coating Line	Pre-1972	Afterburner
6H	Tape Coating Line	Pre-1972	None
H-Wing Churns (8 Units) G-Wing Churns (7 Units)	Coating Line Churns	Pre-1972	None
Moguls Nos. 2, 4, and 6	Three Moguls	Pre-1972	Afterburner (One Product Only, for Odor Control)
Blenders Nos. 5N, 7N, 7S, 9N, 9S, 11N, and 11S	Seven Blenders, Each Equipped with Reflux Condensers	Pre-1972	None
Room 8 Churns (6 Units) Room 12 Churns (5 Units)	Compounding Churns	Pre-1972	None
34 Tanks	Storage Tanks	Pre-1972	Submerged Loading Pipe
Tank 9	Storage Tank	1991	Submerged Loading Pipe
Tanks 10-13	Storage Tanks	1994	Submerged Loading Pipe
Fabric Coater	Fabric Coater	1992	None
Milling Line Equipment #83	Rubber Milling System Including Banbury Mixer, Conveyors, Extruder, Pellet Cutter and Pellet Cooler	Pre-1972	Baghouses on Banbury Mixer and Pellet Cooler
6H Adhesive Compounding	Hot Melt Adhesive Compounding Area Including Rubber or Resin Hopper/Feeders, Resin Melt Tanks, Hold Tanks, Extruder and Scrap Storage	1979	One Baghouse for Hopper/Feeders

Emission Unit	Description	Date Constructed ^a	Emission Control Equipment
11J Extrusion Line	Extrusion Line and Associated Resin Silos, Hopper, Extruder, Corona Treater and Scrap Grinder	1993	Bin Filters on Silos, Baghouse on Extruder Inlet and Ozone Destructor on Corona Treater
Air Conveying Equipment (5)	Pneumatic Systems Moving Rubber and Resin	1990	Filters
IN-1	Solid Waste Incinerator with Waste Heat Boiler	1984	Baghouse BGH-1
BLR-1	Natural Gas Fired Boiler with Fuel Oil #6 Back-Up	1951	None
BLR-2	Natural Gas Fired Boiler with Fuel Oil #6 Back-Up	1951	None
BLR-3	Natural Gas Fired Boiler with Fuel Oil #6 Back-Up	1956	None

^a Date constructed is for emission unit only, control equipment may have been added at a later date.

** Existing thermal oxidizer, originally installed in 1989 on Coating Line 2G, which was removed from operation when Line 6G was installed.

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, PM, NO_x, SO₂ and HAP emissions.

5.2 Applicable Regulations

5.2.1 Emission Standards of General Applicability

In addition to the particular regulations set forth for specific emission units in Section 7 (Unit-Specific Conditions) of this permit, emission units at this source are subject to the following emission standards and limitations of general applicability:

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

- c. i. 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)].
- ii. 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].

- iii. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

5.2.2 Requirements for Ozone Depleting Substances

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

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

5.2.3 Episode Action Plan

- a. As a stationary source 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. A copy of any revisions to the plan 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.

5.2.4 Requirement for 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 Condition 9.8.

5.2.5 Environmental Management System Agreement (EMSA)

- a. The Permittee has entered into an Environmental Management System Agreement (EMSA) with the Illinois EPA. Pursuant to Section 52.3 of the Act and 35 IAC Part 187, the EMSA establishes more stringent requirements on the source in exchange for allowing flexibility in other respects. The provisions of the EMSA are only enforceable under state law.
- b. Certain provisions of the EMSA, as addressed elsewhere in this CAAPP permit, may not be authorized by Illinois' State Implementation Plan (SIP) approved by USEPA. For those provisions in the EMSA, the Illinois EPA intends to submit to USEPA a site-specific SIP revision which when approved by USEPA would revise the SIP, as applicable to 3M, to be consistent with the EMSA. Until such time as USEPA approves the SIP revision or formally approves a particular provision, the requirements of the current SIP will remain in effect as a matter of federal law.

- 5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B 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 Condition 9.8.

- 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.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

- a. The Permittee shall repair any component from which a leak of VOL can be observed. The repair shall be completed as soon as practicable but no later than 15 days after the leak is found, unless the leaking component cannot be repaired until the next process unit shutdown, in which case the leaking component must be repaired before the unit is restarted. [35 IAC 218.986(e)(1)]
- b. For any leak which cannot be readily repaired within one hour after detection, the Permittee shall keep the following records [35 IAC 218.986(e)(2)]:
 - i. Name and identification of leaking component;
 - ii. Date and time the leak is detected;
 - iii. Action taken to repair the leak; and
 - iv. The date and time the leak is repaired.

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations.

The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	2,455
Sulfur Dioxide (SO ₂)	218
Particulate Matter (PM)	147
Nitrogen Oxides (NO _x)	227
HAP, not included in VOM or PM	---
TOTAL	3,047

5.5.2 Emissions of Hazardous Air Pollutants

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

5.5.3 Other Source-Wide Emission Limitations

- a. The annual emissions from tape coating lines at the source shall not exceed 3,822 tons/year, with compliance determined from a running total of 365 days of data. This limitation was established in Permit 94060128, pursuant to 35 IAC Part 203. This ensured that the construction of coating line 6G as addressed in that permit did not constitute a new major source or major modification pursuant to 35 IAC Part 203. [T1]
- b.
 - i. The annual emissions of VOM from the source shall not exceed 2,455 tons/year consistent with the limitation in the Environmental Management System Agreement (EMSA) entered into between the Illinois EPA and the Permittee. Notwithstanding the expiration date of this permit or the EMSA this limitations will remain in effect until revised or deleted by the Illinois EPA in accordance with the applicable rules and administrative procedures for Title I permits. (See also Condition 5.2.5, 5.8.1, and 8.7)
 - ii. Compliance with this limitation shall be determined from a running total of 365 days of data, compiled on at least a monthly basis. For this purpose, however VOM emissions from emission units other than coating lines (Section 7.1) and compounding units (Section

7.2) may be determined on up to an annual frequency, and included in the running total until replaced by a new determination. If VOM emissions are not determined on a daily basis, a multiplier shall be applied to the emissions considering the frequency with which emissions are determined. In particular, if VOM emissions are determined by the Permittee on a weekly, monthly, or annual basis, such determination shall be multiplied by a factor of 1.1, 1.25, and 2.00, respectively, when determining compliance with the VOM limitation.* (See also Condition 5.6.1(b) and 5.9.2).

* For example, if VOM emissions from tanks are being determined once per year, the emissions from tanks on each day in a year shall be assumed to be 2/365 of the determination of emissions for tanks for the previous year.

iii. As of the date of issuance of this permit, this limitation is only enforceable as a matter of State law. As a matter of federal law, this limitation will not be enforceable by USEPA until the associated advanced authorization for construction activity is approved by USEPA, either by approval of a site-specific SIP revision or through other formal approval [See Conditions 5.2.5(b) and 5.8.1].

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

- a. The Permittee shall maintain records of the following items based on the records kept pursuant to Section 7 (Unit Specific Conditions) of this permit for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions from the source on a calendar year basis for the emission units covered by Section 7 of this permit, with supporting calculations, based on the records kept pursuant to Section 7 of this permit.

- b. The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.3, pursuant to Section 39.5(7)(h) of the Act.

- i. Daily emissions of VOM from each category of emissions unit, for which daily emissions are determined (coating lines and compounding units) based on the records kept pursuant to Section 7.1 and 7.2 of this permit;
- ii. Weekly, monthly, or annual emissions and equivalent daily average emission rates of VOM from other categories of emission unit at the source, including the following categories of insignificant activities; cold cleaning degreasers and leaking fittings and components. These records shall be accompanied by supporting data and emission calculations. This data shall be updated annually, by May 1 of each year, at which time the new equivalent daily average emission rates shall be used below when determining total annual emissions of the source; and
- iii. Total annual emissions determined as the sum of 365 days of the above daily data.

5.6.2 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 general source conditions in Section 5 of this permit, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

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

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall report the emissions of HAPs from the source in its Annual Emissions Report (Condition 9.7).

5.8 General Operational Flexibility/Anticipated Operating Scenarios

5.8.1 Provisions of the EMSA for Construction Activity

- a. Consistent with the Environmental Management System Agreement (EMSA), (see Condition 5.2.5) the Permittee has advance authorization to undertake construction activity for emission units and air pollution control equipment without having to apply for and receive any further construction permit from the Illinois EPA pursuant to the state permitting requirements in 35 IAC Part 201, Subpart D. For purposes of 35 IAC §201.142, this advance authorization is deemed to be a state construction permit.
 - i. For any "Construction Activity" involving process equipment, other than "Major Construction Activity", undertaken at the plant, 3M Bedford Park is not required to obtain a state permit under 35 IAC Part 201, Subpart D. So long as a Construction Activity does not qualify as a Major Construction Activity, as these terms are defined below, no permit will be required under 35 IAC Part 203 since the activity will not be a major new source or a major modification.
 - ii. For this purpose, "Construction Activity" means construction of a new emission source or air pollution control equipment, modification of an emission unit or air pollution control equipment or other proposed action related to emissions, and associated with operation of such unit or equipment for which a state construction permit would otherwise be required pursuant to 35 IAC §201.142.
 - iii. "Major Construction Activity" means any Construction Activity for which a construction permit or approval is required pursuant to state or federal laws or regulations adopted pursuant to Section 111, 112(g), 165, or 173 of the Federal CAA. Construction Activity

that results in actual VOM emissions from the source remaining below the annual emission cap included in Condition 5.5.3(a), as it may be reduced pursuant to the ERMS program or other applicable requirements will not constitute a "Major Construction Activity" with regard to VOM. This VOM cap is less than historic actual emissions.

- b. For any Construction Activity undertaken pursuant to this condition, the Permittee shall notify the Illinois EPA within 30 days before commencing the construction project if possible, or otherwise as soon as practicable, but in no case later than initial operation. This notification must be sent to the Illinois EPA, Bureau of Air Compliance Section and the Maywood Office of the Field Operations Section. The addresses are in Section 8.6.4 of this permit. This notification shall include:
 - i. A description of the Construction Activity;
 - ii. The dates (planned or actual) for commencement of construction or initial operation;
 - iii. The pollutants that will be emitted and expected changes in the source's regulated emissions;
 - iv. An explanation of why notice could not be provided earlier if notification is not provided at least 30 days prior to commencement of on-site construction activity; and
 - v. Any necessary changes in recordkeeping or reporting.

- c. For any Construction Activity undertaken pursuant to this condition, the Permittee shall maintain the following records:
 - i. The expected annual and seasonal increase in VOM emissions, if any, from the Construction Activity, with supporting materials;
 - ii. An appropriate description of the Construction Activity, including drawings and specifications, emission unit identifiers, and other information to reasonably describe the change; and
 - iii. Information concerning the monitoring or recordkeeping to be used to determine the

actual emissions, if any, from the Construction Activity.

- d. Nothing in these provisions precludes the Permittee's ability to obtain construction permits and operating permits in accordance with the otherwise applicable regulations for modified and new emission sources.
- e. As of the date of issuance of this permit, the above provisions for advance authorization for certain construction activity are only effective as a matter of state law. As a matter of federal law, this advance authorization will not be effective until approved by USEPA, either by approval of a site-specific SIP revision or through other formal approval. [See Condition 5.2.5(b)]

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

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

5.9.2 Procedures for Calculating VOM Emissions from Insignificant Emission Units

The permitted emissions for fees in Condition 5.5.1 does not include insignificant activities. However, the same VOM emissions limit as the fee amount in the EMSA includes insignificant activities. Therefore, the following procedures are established for calculating VOM emissions from insignificant activities*.

- * Historically, annual emissions of the individual categories of insignificant activities have ranged from 0.5 to 5.0 tons/year.
- a. Storage Tanks and Process Flow Through Tanks: AP-42 emission factors or latest versions of USEPA TANKS program.
- b. Cold Cleaning Degreaser (i.e., Beringer Cleaner): Material balance or AP-42 emission factors.
- c. Miscellaneous Cleaning Solvents: Material balance for one month may be multiplied by 12 for an annual figure.

d. Fugitive Equipment Leaks: USEPA emission factors based on number of pumps, valves, and flanges in the SARA 313 report.

e. Combustion Units: AP-42 emission factors.

5.10 Generally Applicable Permit Shield Provisions for the Source

N/A

6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

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

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

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

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

Note: This narrative description of the ERMS is provided for informational purposes and is not intended to be enforceable as a legal matter. Refer to the ERMS, 35 IAC Part 205, and the provisions which follow for enforceable requirements of the ERMS.

6.2 Applicability

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

6.3 Obligation to Hold Allotment Trading Units (ATUs)

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

6.4 Market Transactions

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

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

6.5 Emissions Excursion Compensation

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

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the Alternative Compliance Market Account (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 November 30 of each year, for the preceding seasonal allotment period.

6.8 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.

6.9 Allotment of ATUs to the Source

- a.
 - i. The allotment of ATUs to this source is 10,237 ATUs per seasonal allotment period.
 - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 1,163.3 tons per season.
 - A. This determination includes the use of 1993 and 1994 as baseline seasons. This determination includes use of the 1993 season as a substitute for the 1995 season due to non-representative conditions in this season, as allowed by 35 IAC 205.320(a)(2).
 - B. This determination also includes adjustment to actual emissions to account for voluntary over-compliance at the source, e.g., use of a

control device on Lines 2H and 3H when compliance coatings were in use, pursuant to 35 IAC 205.320(d), as further addressed in Section 7 of this permit.

- 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.

6.10 Exclusions from Further Reductions

When the allotment of ATUs to the source was determined the baseline VOM emissions of the following emission units were not subjected to the reductions requirements in 35 IAC 205.400(c) and (e) because the source demonstrated in its ERMS application and the Illinois EPA determined that the emission units meet the criteria below [35 IAC 205.405(a) and (c)]. Such treatment only applies as long as such emission units continue to satisfy the following [35 IAC 205.405]:

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

6.11 Federal Enforceability

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

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit Tape Coating Lines
Control Afterburners or Compliance Coatings

7.1.1 Description

The Permittee operates coating lines on which coatings are applied to paper and plastic substrates to make pressure sensitive tape. The paper or plastic substrate is unwound from a large roll, sent through from one to three coating applicators and various drying ovens and then rewound into another roll. The solvent in the coatings evaporates in drying ovens which are vented to thermal oxidizers (afterburners) except one line, 6H. Coating Line 6H was converted in 1979 to use compliant coatings (i.e., coatings containing a lower amount of VOM solvent).

All the tape coating lines are existing lines constructed before 1972 except Line 6G. Line 6G, which was built in 1996, replaced another existing line, Line 2G, and may ultimately replace other existing lines as well.

The coatings used in the coating line are kept in associated holding churns, which may stir the coating to avoid settling and maintain uniformity and in which final additions and adjustments to coatings are made.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
1G	Coating Line	Afterburner
3G	Coating Line	Afterburner
4G	Coating Line	Afterburner
5G	Coating Line	Afterburner
6G	Coating Line	Afterburner
2H	Coating Line	Afterburner
3H	Coating Line	Afterburner
4H	Coating Line	Afterburner
5H	Coating Line	Afterburner
6H	Coating Line	None ^a

^a This line has the option to be vented to an afterburner but typically operates with compliant coatings.

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected coating line" for the purpose of these unit-specific conditions, is a coating line which applies a solvent-containing coating to a paper or plastic film substrate. The affected coating lines

at the source, as of the date of permit issuance, are identified in Condition 7.1.2.

b. Each affected coating line is subject to the emission limits in 35 IAC 218 Subpart F. This Subpart has three principal methods of compliance, as discussed below. These three alternatives are: use of compliance coatings; use of high efficiency add-on control equipment, such as afterburner; or limited use of control equipment so as to achieve an emission rate that is equal to or better than would be achieved with compliant coatings.

i. Any affected coating line that that is complying without reliance on control equipment, shall comply with 35 IAC 218.204(c). This rule limits the VOM content of coating as applied to no more than 2.3 pounds of VOM per gallon of coating. The emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from 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.

As of the date of issuance of this permit, only coating line 6H generally complies by means of compliance coating as stated above. However, Line 6H is equipped with control equipment which may be used to comply by means of Condition 7.13(b)(ii) or (iii) to follow.

Each individual coating does not have to comply with 35 IAC 218.204(c) provided that the daily-weighted average VOM content of all coatings applied on the affected coating line does not exceed 2.3 lb/gal. [35 IAC 218.205(a)]

ii. Each affected coating line that is equipped with control equipment shall comply with 35 IAC 218.207(b)(1), until the Permittee notifies the Illinois EPA that for such line it will comply by means of 35 IAC 218.207(b)(2), and carry out the recordkeeping and reporting required by 35 IAC 218.211(e). This rule, 35 IAC 218.207(b)(1), requires that a capture and control device be operated to demonstrate at least 81 percent overall control of VOM emissions and at least 90

percent efficiency from the control device.
(See also Condition 7.1.5, which imposes more stringent requirements.)

- iii. Each affected coating line that does not comply with Condition 7.1.3(b)(i) or (ii) above, shall comply with 35 IAC 218.207(b)(2). This rule requires that a capture and control system be operated to demonstrate an overall efficiency sufficient to limit VOM emissions from the affected coating line to no more than what is allowed under 35 IAC 218.204(c). Overall efficiency is to be determined using solid basis calculations described in 35 IAC 218.206.
- c. Coating Line 6G is subject to the NSPS for Pressure Sensitive Tape Surface Coating Operations, 40 CFR 60, Subparts A and RR (60.440 et. seq.). The VOM emissions from line 6G shall be reduced by 90% by the capture and control system. (See also Condition 7.1.5, which requires a reduction greater than 90%.)

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected coating lines not being subject to 35 IAC 218.301, because coating lines subject to the emission limitations in 35 IAC 218 Subpart F are not required to meet 35 IAC 218.301. [35 IAC 218.209]
- b. This permit is issued based on affected coating lines, other than Coating Line 6G, not being subject to the NSPS 40 CFR Part 60 Subpart RR, because they were constructed prior to December 30, 1980 and have not been modified or reconstructed thereafter.

7.1.5 Control Requirements and Work Practices

- a. The following requirements were established in Construction Permit 94060128 and were imposed to facilitate compliance with VOM emission limitations established in that permit (see also Conditions 5.5.3(a) and 7.1.6(a)). These requirements also assure compliance with Condition 5.5.3(b). (T1)
 - i. The afterburners for affected coating lines shall be operated at the temperature specified in the Table below in order to achieve the specified overall control efficiency. (T1)

<u>Coating Line No.</u>	<u>Control Equipment</u>	<u>Minimum Overall Control (%)</u>	<u>Minimum Afterburner Temperature (°F)</u>
1G	Afterburner	90	1400
3G	Afterburner	90	1300
4G	Afterburner	90	1300
5G	Afterburner	90	1400
6G	Afterburner	96.5	1403
2H	Afterburner	90	1400
3H	Afterburner	90	1400
4H	Afterburner	90	1400
5H	Afterburner	90	1400

- ii. The afterburner for Lines 2H and 3H may be bypassed (i.e. direct to atmosphere) during fresh air purge of the afterburners when the afterburner should not contain solvent, and for one minute during rapid shutdown of the ovens or afterburner for safety purposes, provided that the coaters shall also cease operation and shall not be resumed until the afterburner is returned to service. (T1)
 - iii.
 - A. The capture system for Coating Line 6G shall be operated and maintained to provide 100.0 percent capture of VOM emissions, by use of permanent total enclosure, as defined by 35 IAC 218, Appendix B, Procedure T, Criteria for and Verification of a Permanent or Temporary Total Enclosure. (T1)
 - B. The afterburner for the Coating Line 6G shall be operated and maintained to provide 96.5 percent destruction for VOM or such higher value of destruction as committed to by the Permittee. (T1)
 - iv. If Line 6H is changed to rely on control equipment, i.e., an afterburner, as the means of compliance, in place of compliant coatings, the control equipment must be operated to achieve minimum overall VOM control of 90% and the afterburner operate at a minimum temperature of 1400°F.
- b. The following requirements were originally established in Condition 7.6(b) of Construction Permit 94060128 and were imposed to facilitate compliance with NO_x emission limitations established in that permit.

- i. Natural gas or other gaseous fuel shall be the only fuels fired in the fuel burners of Coating Line 6G and its associated afterburner. (T1)
- ii.
 - A. The fuel burners on Coating Line 6G shall be designed to emit no more than 0.14 lb NO_x/million Btu fuel input. (T1)
 - B. The firing rate of the fuel burners on Coating Line 6G, not including the associated afterburner, shall not exceed 20.6 million Btu/hr. (T1R)
- c. The following requirement was originally established in Condition 7.6(c) of Construction Permit 94060128 and was imposed to facilitate compliance with ozone emission limitations in that permit. The Corona treater installed on Coating Line 6G shall be operated in accordance with good engineering practice. [T1R]

7.1.6 Operating Requirements and Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, Coating Line 6G is subject to the following limitations: [T1]:

- a.
 - i. Emissions of VOM from Coating Line 6G shall not exceed 590 tons/yr. Compliance with this limit shall be determined on a daily basis, from a running total of the day's emissions and the previous 364 days of data. [T1]
 - ii. VOM emissions of Coating Line 6G shall not exceed 3,240 lb/day (average 135 lb/hr). [T1]
 - iii. Emissions of VOM from clean-up activities associated with Coating Line 6G shall not exceed 2.4 ton/yr. Compliance with this limit shall be determined on a daily basis, from a running total of the day's emissions and the previous 364 days of data. [T1]
- b. The nitrogen oxide (NO_x) emissions attributable to Coating Line 6G, not including its associated afterburner, shall not exceed 4.5 lb/hr and 19.7 ton/yr. [T1R]
- c. This permit is issued based on negligible emissions of ozone from the Corona Treater on Coating Line 6G. For this purpose, ozone emissions from the Corona Treater shall not exceed 0.92 lb/hr and 4.0 ton/yr. [T1N]

The above limitations were established in Construction Permit 94060128. The limitations in Condition 7.1.6(a) were imposed so that the VOM emissions of Coating Line 6G would comply with a requirement to provide internal offset for this line pursuant to 35 IAC Part 203. The limits in Condition 7.1.6(b) and (c) were imposed so that Coating Line 6G would not constitute a major modification for emissions of NO_x or ozone.

7.1.7 Testing Requirements

- a. The VOM emissions of an affected coating line shall be measured by a qualified independent testing service as follows:
 - i. Timing of testing as follows:
 - A. The capture efficiency for a capture system shall promptly be determined if it is not operated and maintained in its current configuration or an enhanced configuration, or the Permittee requests a level of capture efficiency for emission calculations higher than 92 percent capture (92% capture X 98.0% destruction = 90% overall control, as relied upon in Condition 7.1.5(a)(i));
 - B. The overall control efficiency of VOM control for coating line shall be measured within 60 days of a written request by the Illinois EPA; and
 - C. Other testing of VOM emissions from an affected coating line shall be measured within 90 days of a written request by the Illinois EPA.
 - ii. The following methods and procedures shall be used for testing efficiency for coating lines:
 - A. Control efficiency of afterburners or other control devices shall be determined in accordance with provisions in 40 CFR 60.446 and 35 IAC 218.105(d).
 - B. Capture efficiency for the Coating Line 6G, i.e., achievement of permanent total enclosure, shall be determined in accordance with 35 IAC Part 218, Appendix B, Procedure T.

C. Capture efficiency for coating lines other than Coating Line 6G shall be determined using the following:

1. The methodology in 35 IAC 218.105(c),
 2. Other applicable procedures for determination of capture efficiency established by USEPA in 40 CFR Part 60, Subpart RR, or
 3. Applicable alternative methods contained in the USEPA guidance document entitled "Guidelines for Determining Capture Efficiency," dated February 7, 1995, as provided by the Environmental Management System Agreement (EMSA) entered into between the Illinois EPA and the Permittee. (See also Condition 5.2.5) For purposes of emission reduction credit/emission offset generation this authorization only allows use of the Data Quality Objective (DQO) method and does not allow use of the Lower Confidence Level (LCL) method, consistent with the USEPA guidance document. This authorization to use alternative test methods is effective as a matter of state law. As a matter of federal law, this authorization will not become effective until approved by USEPA, either by approval of a site-specific SIP revision or through other formal approval. [See Condition 5.2.5(b)]
- iii. The methods and procedures used for other testing of VOM emissions of affected coating lines shall be consistent with applicable USEPA Test Methods (Refer to 40 CFR 60 Appendix A) unless other methods are approved by the Illinois EPA.
- iv. Testing shall be conducted during circumstances which are representative of normal operation, unless otherwise approved or specified by the Illinois EPA. Equipment operating data and material usage during the test shall be recorded.

- b. The VOM content of coatings and other VOM containing materials used on affected coating lines shall be determined as follows:
 - i. The following procedures shall apply as the reference method for determination of VOM content:
 - A. The VOM content of actual samples representative of coatings as applied on the affected coating lines shall be measured.
 - B. VOM content shall be determined by sampling and laboratory analysis in accordance with 35 IAC 218.105(a).
 - C. When the VOM content of a coating(s) is required to be measured, the test report shall be submitted to the Illinois EPA within 60 days of the sampling date. The test report shall include, as a minimum, the VOM content of each coating sampled, a description of the sampling and analysis procedures, documentation for the sampling and analysis, and justification for the selection of coatings sampled, if selected by the Permittee.
 - ii. The following procedures shall apply as the working method for determination of VOM content:
 - A. Individual batches of materials must undergo evaluation as established pursuant to the ISO 9002 Quality Control Product Standard, including measurement of percent solids or density as specified.
 - B. The VOM content of materials shall be based on the target value established pursuant to ISO 9002 procedures.
 - iii. The Permittee shall determine the VOM content of coatings upon written request from the Illinois EPA. In the event of any inconsistency in results for VOM content of an individual coating as determined by the reference method and by the working method, the VOM content determined by reference method shall govern for purposes of determining compliance with Condition 7.1.3(b)(i) and

(iii) [35 IAC 218.204(c) and 218.207(b)(2), respectively].

- iv. In conjunction with reference testing of VOM content, as provided for above, the Permittee shall compare the VOM content determined by ISO 9002 procedures with the reference method measurements. If the VOM content measurements by ISO 9002 procedures, considered overall, are equal to or greater than the VOM content determined by reference testing (as shown by the most recent comparison) the target values themselves shall be used to determine VOM emissions from the source. If the ISO 9002 measurements are lower than the reference measurements, for purposes of this permit a "corrected" target value of VOM content, adjusted upward to account for the difference between the ISO 9002 measurements and reference method measurements shall be used to determine VOM emissions from the source.

7.1.8 Monitoring Requirements

- a. The Permittee shall operate and maintain continuous monitors for the combustion chamber temperature of each afterburner for affected coating lines equipped with an afterburner control system, in accordance with applicable provisions of the NSPS 40 CFR 60.443(c) and 60.445(e) and 35 IAC 218.104(d)(2)(A).
- b. The Permittee shall operate and maintain a continuous monitoring device for operation of the capture system of Coating Line 6G, pursuant to 40 CFR 60.415(g), if the capture system includes a hood or enclosure that is not interlocked with operation of the coating line.

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 affected coating lines pursuant to Section 39.5(7)(b) of the Act:

- a. Daily operating information shall be kept for each line equipped with a control system for operating time of the coating line and its associated capture system, control device and monitoring equipment, pursuant to 35 IAC 218.211(e)(2)(c), as further provided below. This information shall be input into operating logs at least quarterly. These logs shall be sufficient to identify operating time of each coating line, all periods when a coating line

operates without its associated capture system and control device in operation, and all periods when a coating line operates with its associated capture system and control device but the monitoring equipment is not in service.

- i. The occurrence of fresh air purges of an oven, which are vented directly to the atmosphere, that are associated with normal start-up of a coating line, when the oven would be expected to contain coatings that have not been dried, need not be entered in these logs as operation of the coating line without the control system.
 - ii. The occurrence of potentially VOM-laden purges of an oven that are associated with automatic shutdown of the oven or the afterburner, need not be specifically entered in these logs as operation of the coating line without the control system if the shutdown of coating application system is also automatically triggered at the same time.
- b. Maintenance logs shall be kept for the capture system on each coating line, each control device and the monitoring equipment associated with each capture system and control device that detail all routine and non-routine maintenance performed including dates and duration of any outages, pursuant to 35 IAC 218.211(e)(2)(D).
- c. Monitoring data collected pursuant to Condition 7.1.8, pursuant to 35 IAC 218.211(e)(2)(B) and 40 CFR 60.455(c) (Coating Line 6G only).
- i. Records of any period during actual coating operation of coating line 6G when the monitored temperature of the afterburner drops below the level required by Condition 7.1.5(a) or 40 CFR 60.443(c).
 - ii. Records of any period during actual coating operation of coating lines other than line 6G that equipped with an afterburner system when the monitored temperature of the afterburner drops below the level set by Condition 7.1.5(a).
- e. The VOM content in lb VOM/gallon of each coating and other VOM containing material used on the coating lines. For this purpose, a thinning solvent or other coating additive shall be considered a coating. These records shall be kept current and include the

date and source of data, i.e., reference measurement in accordance with Condition 7.1.7(b)(i), working measurement in accordance with Condition 7.1.7(b)(ii), or formulation data from off-site supplier. Coatings used on Coating Line 6G shall be identified in these records, so as to be able to satisfy 40 CFR 60.445(a) [The recordkeeping requirement of the NSPS] for Coating Line 6G.

- f. The amount of each coating used by each coating line on a daily basis, as further provided below.
 - i. The amount of each coating used may be determined from records of production of individual products and representative measurements of the loading of coating on the substrate, in which case the Permittee shall keep records of the coating loading measurements and daily production of individual products.
 - ii. If the Permittee elects to determine coating usage from records of production and measurements of coating loading, as above, the Permittee shall directly measure coating usages, e.g., by use of a calibrated flowmeter, during previous emission testing. If the coating usages by production records and empirical measurements, considered overall, are equal to or greater than the direct measurements (as shown by the most recent comparison), the coating usage may be recorded without correction. If the Coating usages are lower than the direct measurements, the coating usage for purposes of this permit shall be a "corrected" value, adjusted upward to account for the difference.
- g.
 - i. The average amount of VOM solvents used for clean-up activities associated with coating line 6G (lb/day) based on records that are compiled on at least a monthly basis.
 - ii. The average amount of VOM solvent used for clean-up activities associated with all coating lines (lb/day-line) determined annually from records of solvent usage during a representative month during the year.
 - iii. The amount of VOM solvent used for clean-up activities may consider recovery of material shipped offsite for disposal or recovery, if the amount of VOM recovered is determined prior to shipment or placement in a sealed

container prior to shipment. In this case, in addition to daily records of VOM solvent dispersed for clean-up activities, the Permittee shall also keep records of the amount of VOM recovered and the difference between material dispersed and material recovered, i.e., usage.

- h. The following information for affected coating lines calculated at least monthly for all days since the previous calculations, based on the records pursuant to Conditions 7.1.9 (a) through (g):
 - i. The amount of VOM in coatings used on each coating line.
 - ii. The average VOM control efficiency of the control system for each coating line equipped with an afterburner, determined from the records required by Condition 7.1.9(d) and the appropriate procedure in Condition 7.1.12.
 - iii. The VOM emissions attributable to applied coating for each coating line, ton/day, determined in accordance with Condition 7.1.12.
 - iv. The VOM emissions from clean-up activities associated with Coating Line 6G, in ton/day.
 - v. The VOM emissions from clean-up activities associated with all affected coating lines, in ton/day.
 - vi. The VOM emissions for Coating Line 6G, in ton/yr.
 - vii. The VOM emissions for all coating lines total, in ton/yr.
- i. For any affected coating line that is complying with Condition 7.1.3(b)(i), such as Coating Line 6H, the following information shall be kept in accordance with 35 IAC 218.211(c) and (d) to verify compliance with Condition 7.1.3(b)(i).
 - i. The name and identification number of each coating as applied on the coating line.
 - ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on the coating line.

- iii. Until and unless the Permittee notifies the Illinois EPA that compliance will be shown for each coating applied rather than by a daily-weighted average, the daily-weighted average VOM content of all coatings as applied on the coating line determined in accordance with 35 IAC 218.205.
- j. For Coating Line 6G, the records required by the NSPS, 40 CFR 60.445(a).
- k. The following information related to HAP emissions for affected coating lines:
 - i. The HAP content of coatings and clean-up solvent used on the coating lines;
 - ii. The HAP emissions for all coating lines at the source, ton/yr, based on HAP content of coatings, usage of coatings, and overall control efficiency (if a control system is used), with supporting calculations.

7.1.10 Reporting Requirements

- a. The Permittee shall notify the Illinois EPA and USEPA if any changes are made to a capture system or control device on an affected coating line, pursuant to 35 IAC 218.105(c)(3)(B). Such notification shall include a description of the change, the anticipated effect on control system efficiency, and the date the change was made or is scheduled to be made.
- b. The Permittee shall notify the Illinois EPA at least 30 days before change the method of compliance with Condition 7.1.3(b), for example changing from use of afterburners to use of compliant coatings.
- c. 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:
 - i. The Permittee shall report any record showing violation of Condition 7.1.3(b) in accordance with 35 IAC 218.211.
 - ii. The Permittee shall promptly notify the Illinois EPA of other noncompliance. This notification shall include a detailed

explanation of the circumstances of the exceedance(s) and the measures taken to prevent a reoccurrence.

- d. For Coating Line 6G, the Permittee shall submit reports of exceedances of Condition 7.1.3(c) and afterburner temperature drops in accordance with the NSPS, 40 CFR 60.447(b) and (c).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the operational flexibility allowed pursuant to Condition 5.8, the Permittee is authorized to make the following physical or operational changes with respect to the affected coating lines identified in Condition 7.1.2 without prior notification to the Illinois EPA or revision of this permit.

Application of new coatings, i.e., coatings with different formulations.

Physical changes, including changes affecting the capability of affected compounding lines.

Improvements to associated capture systems and control devices.

Note: Affected coating lines must still comply with the requirements in Condition 7.1.3, 7.1.5 and 7.1.6.

7.1.12 Compliance Procedures

- a. Calculation of Available VOM Emissions from Affected Coating Lines

The available emissions are the sum of the VOM in raw materials used on a coating line as determined by Procedure 1 or 2.

Procedure 1 - Emissions based on production

The following equation shall be used to determine available VOM emissions from production data:

Production rate x Coating rate x coating VOM Content, (% by wt./100) = Available VOM

$$\frac{\text{lin. yards}}{\text{day}} \times \frac{\text{lb ctg}}{\text{lin. yard}} \times \frac{\% \text{ VOM}}{100} = \frac{\text{lb VOM}}{\text{day}}$$

The calculation is repeated for each of the coatings applied to a product. The sum of the emissions from the applied coatings for all products made on a coating line during a day equals the available

emissions. The following example will illustrate this process: If 1,000 yards of product "d" are made on a day on coater "e" and product "d" has three different coatings, then the emission calculation is used to determine the available VOM emissions from each of the three coatings applied to 1,000 yards. The coating emissions are then summed to determine available VOM emissions for product "d".

Procedure 2 - Emissions based on material usage

The following equation shall be used to determine available VOM emissions:

$$\text{Coating used} \times \text{VOM content} = \text{Available VOM}$$

of coating from coating

$$\text{gal ctg/day} \times \text{lb VOM/gal} = \text{lb Available VOM/day}$$

The calculation is repeated for each of the coatings applied. The sum of the emissions from the applied coatings equals the available emissions.

Note: If a coating line is not controlled by a control system, e.g., Coating Line 6H, the available emissions are the actual emissions.

b. Calculation of Controlled VOM Emissions from Affected Coating Lines

If a coating line is controlled by an afterburner system, the available emissions are adjusted for the actual control efficiency, considered on a daily basis, to determine the actual emissions.

i. Routine Operation of an Afterburner Control System

The following equation shall be used to determine controlled emissions on a daily basis:

$$\text{VOM Emitted (lb/day)} = \text{Available VOM (lb/day)} \times (1 - \text{Overall Control Efficiency (\%)/100})$$

Where:

$$\frac{\text{Overall Control Efficiency \%}}{100} = \frac{\text{Afterburner Destruction Efficiency \%}}{100} \times \frac{\text{Capture Efficiency \%}}{100}$$

ii. Non-Routine Operation of an Afterburner Control System

$$\text{VOM Emitted (lb/day)} = \text{Available VOM (lb/day)} \times [1 - (\text{Overall Control Efficiency (\%)/100} \times \text{Adj. Factor})]$$

The Control Efficiency Factor is the time-weighted average of control efficiency for the actual operation hours of the coating line during a day (T).

$$\frac{\sum_{i=1}^T \text{Adjustment Factor}}{T}$$

Where i is time, in hours

and, the adjustment factor is determined from afterburner combustion chamber temperature as follows:

<u>Afterburner 3-hour Average Combustion Chamber Temperature (F Below Temperature During Testing)</u>	<u>Adjustment Factor for Destruction Efficiency</u>
0 to 49	1.0 (adjustment)
50 to 99	0.98
100 to 149	0.95
150 to 199	0.90
200 to 249	0.80
250 or greater	0.0

c. Emissions of HAPs

Emissions of HAPs may be determined from VOM emission data and the composition of the solvents used in the affected units.

7.2 Unit Coating Compounding Operation

7.2.1 Description

The Permittee formulates much of its own coating by mixing rubber, resin and other solid materials and organic solvents in its compounding operation. The mixing process may be done in compounding vessels called moguls, blenders or churns, depending on the nature of the device. To prevent nuisance odors, the moguls are vented to an afterburner when coatings that have a strong odor are being formulated.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Mogul Nos. 2, 4 and 6	Moguls	Afterburner (Only for Odor Control)
Blender Nos. 5N, 7N, 7S, 9N, 9S, 11N, 11S	Blenders with Reflux Condensers	None
Room 8 Churns (6 Units) Room 12 Churns (5 Units)	Compounding Churns	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected compounding unit" for the purpose of these unit-specific conditions, is a vessel in which coatings are formulated. The compounding units at the source as of the date of permit issuance are identified in Condition 7.2.2.
- b. Each affected compounding unit is subject to 35 IAC 218.301 which requires that: No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from an emission unit, provided however, that if no odor nuisance exists the limitation shall apply only to photochemically reactive material as defined in 35 IAC 211.4690. (This requirement applies individually to each unit.)

7.2.4 Non-Applicability of Regulations of Concern

As a matter of state law, each affected compounding unit is not subject to 35 IAC 218 Subpart QQ, pursuant to the EMSA between the Permittee and the Illinois EPA [See Condition 5.2.5]. Otherwise, as a matter of state law, 35 IAC 218.946(a) would require an emission capture and control techniques which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from

each affected compounding unit. Before the EMSA, from the time that the applicability threshold of Part 218, Subpart QQ was lowered to potential VOM emissions of 25 tons/year, potentially covering the source, the source was excluded from Part 218, Subpart QQ pursuant to variances from the Pollution Control Board (IPCB) during which the maximum theoretical emissions were reduced to below 100 tons of VOM per year. The variance granted by the IPCB on February 19, 1998 was submitted to the USEPA as a SIP revision.

Illinois EPA intends to submit to USEPA a revision to Illinois' SIP to exclude the Permittee's compounding operations from regulation under Subpart QQ. Until this SIP revision is approved by USEPA, this determination is not effective as a matter of federal law. Accordingly, the permit shield in Section 8.1 will only be effective with regard to state requirements until the SIP revision is approved by the USEPA.

7.2.5 Control Requirements

None

7.2.6 Operational Requirements and Emission Limitations

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

- a. Emissions of VOM and operation of moguls shall not exceed the following [T1]:

<u>Operation</u> <u>(hours/quarter)^a</u>	<u>VOM Emissions</u>		
	<u>(lb/hr)^b</u>	<u>(lb/qtr)^a</u>	<u>(ton/yr)^a</u>
4,200	2.7	11,340	22.7

^a Three moguls combined

^b Based on average batch emissions per mogul which includes solvent addition time and mix time.

- b. Emissions of VOM and operation of blenders combined shall not exceed the following:

<u>Operation</u> <u>(hours/quarter)^a</u>	<u>VOM Emissions</u>		
	<u>(lb/hr)^b</u>	<u>(lb/qtr)^a</u>	<u>(ton/yr)^a</u>
8,400	4.2	35,280	70.6

^a All blenders combined

b Per blender

- c. Compliance with quarterly limits shall be determined from a running total of 3 months of data.
- d. This permit is issued based upon emissions of VOM from laboratory testing of production runs, i.e., for the purpose of quality control tests, not exceeding 0.14 tons/quarter and 0.56 tons/yr.

The above limitations contain revisions to previously issued Construction Permit 88090044. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this construction permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, a previous condition that the total period of solvent addition for the moguls not exceed 9% of total batch time has been deleted because it could create unsafe operating conditions in the moguls, the requirement did not actually reduce emissions, and it required burdensome recordkeeping. (T1R)

7.2.7 Testing Requirements

The VOM emissions of an affected compounding unit shall be measured by a qualified independent testing service as follows:

- a. Upon written request by the Illinois EPA, the VOM emissions from an affected compounding unit shall be tested, within 120 days.
- b. The methods and procedures used for testing shall be consistent with applicable USEPA test methods.
- c. Testing shall be conducted during circumstances which are representative of normal operation unless otherwise approved or specified by the Illinois EPA.

Equipment operating data and material usage during the test shall be recorded.

- d. Prior to conducting such testing, the Permittee shall notify the Illinois EPA in accordance with Condition 8.6.2. As part of this notification, the Permittee shall identify the specific formulation that has been selected for testing, with an explanation of why it is considered to be representative.

7.2.8 Monitoring Requirements

N/A

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected compounding units, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of emissions tests on affected compounding units. Notwithstanding Condition 9.6.3, these tests must be retained until superseded by other test(s).
- b. Daily operating records for each category of affected compounding units of the (moguls, blenders and churns), including operation hours for each category of mixing equipment (hours/day) and any data that is necessary to show compliance with Condition 7.2.3(b).
- c. Records of VOM emissions on a daily and quarterly basis, calculated in accordance with Condition 7.2.12.
- d. Records of HAP emissions (lb/year), which shall be compiled on at least an annual basis.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected compounding unit with the permit requirements, 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:

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the operational flexibility allowed pursuant to Condition 5.8, the Permittee is authorized to make the following physical or operational changes with respect to the affected compounding units identified in

Condition 7.2.2 without prior notification of Illinois EPA or revision of this permit.

Compounding of new coatings, i.e., coating with formulations that vary from those currently being made.

Physical changes, including changes affecting the capabilities of affected compounding units.

Improvements to associated capture systems and control devices.

Note: Affected compounding units must still comply with the requirements in Conditions 7.2.3, 7.2.5 and 7.2.6.

7.2.12 Compliance Procedures

- a. VOM emissions from affected compounding units shall be determined using emission rates measured during representative emission tests. For example,

Compounding Unit (VOM Emissions) = Emission Rate Determined during May 1991 Emission Test (lb/hr) x Hours of Compounding

Where hours of compounding are determined from daily coating usage on the tape coating lines and compounding process data as follows:

$$\frac{\text{Hours of Compounding Use}}{\text{Day}} = \sum_{i=A}^n \frac{\text{lb ctg } i}{\text{Compounding Factor}}$$

and

$$\text{Compounding Factor} = \frac{\text{Theoretical Batch Yield (lb ctg } i)}{\text{Theoretical Batch Time (hour)}}$$

- b. Emissions of HAPs shall be determined from VOM emission data and the composition of the solvents used in the affected unit.

7.2.13 Compliance Schedules

- a. i. In the event that the Environmental Management System Agreement (EMSA) is terminated by the Permittee, the affected compounding units shall comply with 35 IAC Part 218, Subpart QQ if it is applicable at that time. [See Conditions 5.2.5 and 7.2.4]
- ii. Prior to termination of the EMSA, the Permittee shall apply for a revision of this permit if and as necessary to address

compliance of affected compounding unit with 35 IAC Part 218 Subpart QQ, including establishment of a compliance schedule, if needed.

- b. i. In the event that the EMSA is terminated by the Illinois EPA or the Board, if 35 IAC Part 218 Subpart QQ would be applicable to affected compounding units at that time, the affected compounding units shall be equipped with air pollution control equipment so as to comply with 35 IAC Part 218 Subpart QQ or comply with an Adjusted Standard obtained from the Pollution Control Board no later than 18 months after a final determination concerning the termination of the EMSA.
- ii. Within 90 days of the final determination concerning termination, the Permittee shall apply for a revision of this permit if and as necessary to address compliance of affected compounding units with 35 IAC Part 218 Subpart QQ, including establishment of a compliance schedule if needed.
- c. If the Permittee decides to operate one or more affected compounding units to comply with 35 IAC Part 218, Subpart QQ, notwithstanding the EMSA, the Permittee shall apply at that time for revision of this permit as necessary to address this regulation, including establishment of a compliance schedule if needed, for units that will comply with 35 IAC Part 218, Subpart QQ.

7.3 Unit Storage Tanks
Control Submerged Loading Pipe

7.3.1 Description

The Permittee operates a number of fixed roof storage tanks for solvents and prepared coatings. The tanks all have submerged loading pipes which minimizes emissions during loading.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Tanks 1-8, 14-30, 32-35	Storage Tanks	Pre-1972	Submerged Loading Pipe
Tank 9	Storage Tank	1991	Submerged Loading Pipe
Tanks 10-13	Storage Tanks	1994	Submerged Loading Pipe

See Section 11.2 - Attachment 2 for details on tanks.

7.3.3 Applicability Provisions and Applicable Regulations

An "affected tank" for the purpose of these unit-specific conditions is a fixed roof storage tank with a capacity less than 40,000 gallons that does not store organic liquids with a vapor pressure of 2.5 psia or greater at 70°F, so that it is not subject to any requirements under 35 IAC 218 Subpart B. The affected tanks at the source as of the date of permit issuance are listed in Condition 7.3.2.

7.3.4 Non-Applicability of Regulations of Concern

None of the affected tanks are subject to 35 IAC 218.122(b), which requires submerged loading because the vapor pressure of stored material is below 2.5 psia and affected tanks have not been deemed an odor nuisance.

7.3.5 Control Requirements

None

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, Storage Tank Nos. 10, 11, 12 and 13 are subject to the following limitations:

- a. Vapor pressure of material stored, throughput of material, and emissions of volatile organic material (VOM) shall not exceed the following:

<u>Tank</u>	<u>Vapor Pressure (psia)</u>	<u>Throughput (gal/yr)</u>	<u>VOM Emissions (ton/yr)</u>
10	0.2	1,700,000	0.2
11, 12 and 13	0.5	1,833,000 ^a ea.	0.6 ea.

^a Limit for three tanks combined of 5,500,000 takes precedence over individual limit.

Emissions need only be calculated annually to do determine compliance with the annual limits.

The above limitations were established in Permit 92120061, pursuant to 35 IAC Part 203. These limits ensure that these emission units do not constitute a major modification pursuant to 35 IAC Part 203 [T1].

7.3.7 Operating Requirements

None

7.3.8 Inspection Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected storage tank to demonstrate compliance with Condition 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Dimensions and other properties of each tank as related to VOM emissions;
- b. Vapor pressure, molecular weight and other properties of materials stored as related to VOM emissions;
- c. Material(s) stored and throughput (gallons/month) for each tank; and
- d. VOM and HAP emissions from tanks (ton/year), determined on a calendar year basis using the procedures specified in Condition 7.3.12, with supporting calculations.

- e. VOM emissions from each tank subject to individual limitations (ton/month and ton/year) determined for each month since the previous record, using the procedures specified in Condition 7.3.12, with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected storage tank with the permit requirements, 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.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the operational flexibility allowed pursuant to Condition 5.8, the Permittee is authorized to make the following physical or operational change with respect to the tanks identified in Condition 7.3.2 without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Changes in material stored.

Physical changes, including changes affecting the capability of affected tanks.

Improvements to associated emission control systems.

Note: Affected tanks must still comply with Conditions 7.3.3, 7.3.5 and 7.3.6.

7.3.12 Compliance Procedures

USEPA's TANKS computer program shall be used for the purpose of calculating VOM and HAP emissions from affected storage tanks.

7.4 Unit Fabric Coaters
Control None

7.4.1 Description

The Permittee operates a small fabric (polyester) coater.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Emission Control Equipment
Fabric Coater	None

7.4.3 Applicability Provisions

An "affected fabric coater" for the purpose of these unit-specific conditions, is a fabric coating line. The affected coater at the source as of the date of permit issuance is identified in Condition 7.4.2.

7.4.4 Applicable Emission Standards

The affected fabric coater is subject to 35 IAC 218.301 which states that emissions of organic material shall not exceed 8 lb/hr or shall be nonphotochemically reactive material and not have an odor. Compliance with Condition 7.4.6 assures compliance with the former requirement.

7.4.5 Non-Applicability of Regulations of Concern

An affected fabric coating line is exempt from 35 IAC 218.204(c) if VOM emissions from all fabric coating lines at the source continue to stay under 15.0 lb/day.

Note: At such time that VOM emissions exceed 15 lb/day, the affected coating line would lose its exempt status, so that it would be required to comply with 35 IAC 218.204(c). It would also cease to be subject to Condition 7.4.4 (35 IAC 218.301) pursuant to 218.208(a).

7.4.6 Operating Requirements and Emission Limitations

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

- a. Operations shall not exceed 156 hours per year.
- b. Emissions of VOM shall not exceed 3.2 lb/hour and 0.25 tons/year. These limits include cleanup solvent used on the fabric coater.
- 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) [T1].

The above limitations were established in Permit 92030086, pursuant to 35 IAC Part 203. These limits ensure that the fabric coater does not constitute a major modification pursuant to 35 IAC Part 203 [T1].

7.4.7 Testing Requirements

Upon request by the Illinois EPA, coatings applied on the affected fabric coater shall be tested for VOM content pursuant to the requirements of 35 IAC 218.105(a). However, if an assumption of 100% VOM is made and compliance with Conditions 7.4.3 and 7.4.6 can be met, coatings do not have to be tested.

7.4.8 Inspection Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected fabric coater to demonstrate compliance with Conditions 7.4.4 and 7.4.6, pursuant to Section 39.5(7)(b) of the Act. These records shall satisfy 35 IAC 218.207(a).

- a. Coating and cleanup solvent usage (gallons/month);
- b. Operating hours (hours/month);
- c. VOM and HAP content of coating and cleanup solvent (lb/gallon); and
- d. VOM and HAP emissions (monthly average lb/hour and ton/year).

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected fabric coater with the permit requirements, 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.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the operational flexibility allowed pursuant to Condition 5.8, the Permittee is authorized to make the following physical or operational changes with

respect to the affected coating line identified in Condition 7.4.2 without prior notification to the Illinois EPA or revision of this permit.

Application of new coatings, i.e., coatings with different formulations.

Physical changes, including changes affecting the capability of affected compounding lines.

Improvements to associated capture systems and control devices.

Note: Affected coating lines must still comply with the requirements in Condition 7.4.3, 7.4.5 and 7.4.6.

7.4.12 Compliance Procedures

Material balance calculations shall be used to determine VOM and HAP emissions from the affected fabric coater. For example:

$$\text{VOM Emissions (lb/month)} = \text{Coating Usage (gal/mo)} \times \text{Density (lb/gal)} \times \text{VOM Content (wt. \%)} + \text{Cleanup Solvent Usage (gal/mo)} \times \text{VOM Content (lb/gal)}$$

7.5 Unit Extrusion Lines and Air Conveying Equipment
Control Baghouses - See Condition 7.5.2

7.5.1 Description

The Permittee has several operations engaged in the processing of solid rubber and resin. In the milling line, sheets of rubber are milled and then extruded into pellets containing small amounts of other materials which are then transferred to the blender and mixed with solvent. In the adhesive compounding line various resin, rubber and other minor ingredients are first melted and then sent to an extruder to produce a hot melt adhesive for line 6H. On the 11J extrusion line pellets of a single resin are made into a thin film which is then treated by a corona treater.

The air conveyor systems are then used for transferring resin or rubber to the moguls and blenders. These systems were installed in 1989 pursuant to Permit 89100061.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Milling Line Equipment #83	Rubber Milling System including Banbury Mixer, Two Conveyors, Extruder, Pellet Cutter and Pellet Cooler	Baghouse on Banbury Mixer and Pellet Cooler
6H Adhesive Compounding	Hot Melt Adhesive Compounding Area, Rubber or Resin Hopper/Feeders, Two Resin Melt Tanks, Two Hold Tanks, One Extruder and Scrap Storage	One Baghouse for Hopper/Feeders
11J Extrusion Line	Extrusion Line and Associated Resin Silos, Hopper, Extruder, Corona Treater and Scrap Grinder	Bin Filters on Silos, Baghouse on Extruder Inlet and Ozone Destructor on Corona Treater
Air Conveying Equipment (5)	Blowers for Moving Rubber or Resin	Filters

7.5.3 Applicability Provisions and Applicable Regulations

- a. An "affected extruder line" for the purpose of these unit-specific conditions, is a line with an extruder as the principal process but with peripheral equipment and identified in Condition 7.5.2.
- b. An "affected air conveyor" for the purpose of these unit-specific conditions is a blower and ductwork for transferring rubber or resin as identified in Condition 7.5.2.

- c. i. Each affected extrusion line and each affected air conveyor is subject to 35 IAC 212.321(a), which requires that:

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

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

Where:

P = Process Weight Rate (ton/hr)

E = Allowable Emission Rate (lb/hr)

For process weight rates up to 450 T/hr:

A = 2.54

B = 0.534

- ii. Each Line is considered one emission unit for purposes of the rule, and compliance shall be determined separately for each individual line.
 - iii. All the air conveyors are considered to be a single emission unit for purposes of this rule and compliance shall be determined for the group of conveyors.
- d. Each affected extrusion line and each affected conveyor line is subject to the opacity limit of Condition 5.2.2(a).

7.5.4 Non-Applicability of Regulations of Concern

N/A

7.5.5 Control Requirements

- a. The filters or baghouses shall be operated in accordance with good air pollution control practice to minimize emissions.

- b. The ozone destruction unit shall be operated in accordance with the manufacturer's recommendations to minimize emissions of ozone.

7.5.6 Emission Limitations

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

- a. Emissions from the 11J extrusion line shall not exceed the following limits:

<u>(Lb/Hr)</u>	PM Emissions	<u>(Ton/Year)</u>
0.41		1.8

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) [T1R].

At the request of the Permittee the above limitations revise limitations previously set in Permit 92120053, to be consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance with 35 IAC Part 203, Major Stationary Sources Construction and Modification. These limits continue to ensure that this emission unit does not constitute a major modification pursuant to these rules. Specifically, the applicable limits are being increased from 0.27 to 0.41 lb/hr and from 1.2 to 1.8 ton/yr [T1R].

- b. Emissions from the affected air conveyors shall not exceed the following limits:

<u>(Lb/Hr)</u>	PM Emissions	<u>(Ton/Year)</u>
0.3		1.34

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

The above limitations were established in Permit 89100061. These limits ensure that these emission units do not constitute a major modification pursuant to 35 IAC Part 203.

- c. This permit is issued based on negligible emissions of ozone from the Corona Treater on the 11J Extrusion Line. For this purpose, ozone emissions from the Corona Treater should not exceed 0.1 lb/hr and 0.44 ton/yr.

The above limitations were established in Permit 92120053. [T1R].

7.5.7 Testing Requirements

Upon written request by the Illinois EPA the opacity of the exhaust from an affected unit shall promptly be determined by a qualified observer.

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected extrusion line or conveyor to demonstrate compliance with Conditions 5.5.1, 7.5.3 and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Operating records for each extension line, including throughput of materials (lb/mo);
- b. Inspection and maintenance logs shall be kept for each filter system and the ozone destruction unit that detail inspection and maintenance activities, including date and description of activities; and
- c. PM emissions (lb/mo) of each extrusion line and the air conveyors.

(Although conditions have limits in lb/hr, records do not have to be kept of hourly emissions.)

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected extrusion line or conveyor with the permit requirements, 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:

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the operational flexibility allowed pursuant to Condition 5.8, the Permittee is authorized to make the following physical or operational changes with respect to the affected extruder or conveyor line identified in Condition 7.2.2 without prior notification of Illinois EPA or revision of this permit.

Compounding of new coatings, i.e., coating with formulations that vary from those currently being made.

Physical changes, including changes affecting the capabilities of affected compounding units.

Improvements to associated capture systems and control devices.

Note: Affected compounding units must still comply with the requirements in Conditions 7.5.3, 7.5.4 and 7.5.6.

7.5.12 Compliance Procedures

Particulate matter emissions shall be calculated assuming an exhaust dust loading of 0.03 gr/scf if the control equipment is properly operated in accordance with Condition 7.5.5. For example:

$$\text{PM Emissions (lb/hr)} = (0.03 \text{ gr/scf}) \times \text{Air Flow Rate (scfm)} \times 60 \text{ min/hr} \times 1/7000 \text{ gr/lb} \times (1 - \text{Filter Control Efficiency}/100)$$

7.6 Unit Solid Waste Incinerator
Control Secondary and Reburn Chambers and Baghouse

7.6.1 Description

The Permittee has an incinerator that is used to burn waste paper, paper tape, wood, film and film tape produced at the site. The heat generated produces steam in a waste heat boiler. Emissions are minimized by incinerator design, i.e., the presence of primary and secondary combustion chambers equipped with supplemental natural gas fired burners. The incinerator is also equipped with a baghouse for control of particulate matter emissions. The incinerator was installed in 1984 pursuant to Construction Permit 83110002.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
IN-1	Solid Waste Incinerator with Waste Heat Boiler	Baghouse BGH-1

7.6.3 Applicability Provisions and Applicable Regulations

- a. An "affected incinerator" for the purpose of these unit-specific conditions, is a waste incinerator designed to burn less than 2 tons per hour of waste, as identified in Condition 7.6.2.
- b. The affected incinerator is subject to 35 IAC 212.181(b) which states that: No person shall cause or allow the emission of PM into the atmosphere from any incinerator burning more than 2000 lbs/hr but less than 60,000 lbs/hr of refuse to exceed 0.08 gr/scf of effluent gases corrected to 12 percent carbon dioxide.
- c. The affected incinerator is subject to 35 IAC 216.141 which states that no person shall cause or allow the emission of carbon monoxide into the atmosphere from any incinerator to exceed 500 ppm, corrected to 50 percent excess air.
- d. The affected incinerator is subject to Condition 5.2.2(a), which addresses opacity of emissions.

7.6.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected incinerator not being subject to the federal New Source Performance Standards for Incinerators, 40 CFR 60, Subpart E, because

the capacity of the incinerator is less than 50 tons per day.

7.6.5 Control Requirements, Operational and Production Limits, and Work Practices

- a. i. Only waste paper, paper tape, wood plastic film, film tape and other similar waste materials produced at the plant shall be incinerated.
- ii. The rate at which material is incinerated shall not exceed 2368 pounds per hour determined as a daily average, or such rate at which future emission testing conducted in accordance with Condition 7.6.7 demonstrates compliance with Condition 7.6.3(b), (c), and (d) and Condition 7.6.6.
- b. The secondary combustion chamber shall be preheated to the manufacturer's recommended temperature but not lower than 1400°F, before any waste is charged into the incinerator, and this temperature shall be maintained during incineration.
- c. i. The baghouse shall be operated in accordance with good air pollution control practice to minimize emissions.
- ii. Operation in accordance with good air pollution control practice shall be demonstrated by maintaining the pressure drop of the baghouse in a normal range and its inlet temperature below the manufacturers recommended maximum temperature.
- d. The exhaust of the incinerator shall be observed at least once per day when the incinerator is operating, to confirm that the appearance of the exhaust is normal.

7.6.6 Emission Limitations

Emissions from the affected incinerator shall not exceed the following limitations:

<u>Contaminant</u>	<u>Emissions</u>	
	<u>(lb/hr)</u>	<u>(ton/year)</u>
Particulate Matter (PM)	2.7	11.8
Sulfur Dioxide (SO ₂)	9.0	39.5
Nitrogen Oxides (NO _x)	2.9	12.53
Organic Material (OM)	2.3	10.16
Carbon Monoxide, (CO)	19.5	85.48

These above limitations were first established in Permit 83110002, pursuant to 35 IAC Part 203 and 40 CFR 52.21.

The above limitation for SO₂ has been revised at the request of the applicant to address potential variability in the sulfur content of the source's waste. The limits for SO₂ continue to ensure that this emission unit does not constitute a major modification pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD) [T1/T1R].

7.6.7 Testing Requirements

- a.
 - i. Upon request by the Illinois EPA, the emissions of PM, SO₂, VOM, NO_x and CO from the incinerator shall promptly be measured by qualified independent testing service.
 - ii. These measurements shall be conducted using appropriate USEPA Reference Test Methods, contained in 40 CFR 60, Appendix A.
 - iii. Testing shall be conducted with a representative mixture of waste and circumstances that are representative of normal operation, except that the operating rate shall be the highest rate at which the Permittee wants to operate the unit.
- b.
 - i. Upon request by the Illinois EPA, the opacity of the exhaust from the incinerator shall promptly be determined by a qualified observer.

7.6.8 Monitoring Requirements

- a.
 - i. The Permittee shall operate and maintain monitors for temperature in the primary, secondary and reburn chamber of the solid waste incinerator.
 - ii. The Permittee shall operate and maintain a monitor for pressure drop across the baghouse and the inlet temperature to the baghouse.
 - iii. The Permittee shall operate and maintain a monitor for CO concentration in the exhaust of the incinerator.
- b. These monitors shall be operational when the affected incinerator is in operation, from the initial firing of waste through shutdown and waste burnout.

- c. The Permittee shall maintain logs for the operation and maintenance of these monitoring systems.

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected incinerator 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. Supporting data for the operation of the incinerator, including manufacturers instruction emission test reports, and other information used to set acceptable operating parameters for the incinerator.
- b. Inspection and maintenance logs shall be kept for the incinerator and its associated baghouse, that detail all inspection and maintenance activities performed, including date and description. The observations required by Condition 7.6.5(d) shall be recorded in this log.
- c. Daily operating records for incinerator operating hours, the amount of waste charged to the incinerator and the amount of steam produced.
- b. Records of the monitoring conducted pursuant to Condition 7.6.8:
 - i. Primary chamber temperature (°F)
 - ii. Secondary chamber temperature (°F)
 - iii. Reburn chamber temperature (°F)
 - vi. Baghouse inlet temperature and pressure drop
 - v. Exhaust CO concentration (ppm)

7.6.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA if the operational status of the affected incinerator is changed from inactive to active.
- b. The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected incinerator with the permit requirements, 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:

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected incinerator identified in Condition 7.6.2 without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Improvements to associated control devices.

7.6.12 Compliance Procedures

- a. Compliance with Conditions 7.6.3(b) and (c) shall be demonstrated by operating the incinerator secondary chamber at the temperature specified in Condition 7.6.5(b) and operating the baghouse with a pressure drop in the normal range.
- b. Emissions of the incinerator shall be determined using emission factors developed from representative testing of the unit or otherwise from published USEPA emission factors if the incinerator is properly operated in accordance with Condition 7.6.5.

7.7 Unit 01 - Natural Gas/Residual Fuel Oil Fired Boilers

7.7.1 Description

The Permittee operates natural gas fired boilers with back-up residual fuel oil (#6 oil) to produce steam for process use.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Rated Heat Input Capacity	Emission Control Equipment
BLR-1	Natural Gas Fired Boiler with Fuel Oil #6 Back-up	48.0 mmBtu/hr	None
BLR-2	Natural Gas fired Boiler with Fuel Oil #6 Back-up	48.0 mmBtu/hr	None
BLR-3	Natural Gas Fired Boiler with Fuel Oil #6 Back-up	48.0 mmBtu/hr	None

7.7.3 Applicability Provisions and Applicable Regulations

- a. An "affected boiler" for the purpose of these unit specific conditions is a steam generating unit that has not been modified or reconstructed after June 9, 1989, and that has a heat input capacity from fuels combusted in the steam generating unit of less than 29 MW (100 million Btu/hour), as listed in Condition 7.7.2.
- b. The emissions of particulate matter into the atmosphere in any one hour period from an affected boiler shall not exceed 0.15 kg of particulate matter per MW-hr of actual heat input from liquid fuel (0.10 lbs/mmBtu) [35 IAC 212.206 and 212.207].
- c. The emissions of sulfur dioxide (SO₂) into the atmosphere in any one hour period from an affected boiler shall not exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input from residual fuel oil (1.0 lb/mmBtu) [35 IAC 214.161(a) and 214.171].
- d. The emission of carbon monoxide (CO) into the atmosphere from an affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]
- e. Each affected boiler is subject to the opacity limit of Condition 5.2.2(a).

7.7.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected boilers not being subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc because the boilers were constructed prior to June 9, 1989 and have not been modified or reconstructed thereafter.

7.7.5 Operational and Production Limits and Work Practices

- a. Natural Gas and Residual Fuel Oil (#6 oil) shall be the only fuels fired in the affected boilers.
- b. The sulfur content of residual fuel oil fired in affected boilers shall exceed 0.9 percent by weight.

7.7.6 Emission Limitations

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

N/A

7.7.7 Testing Requirements

Upon written request by the Illinois EPA, the opacity of the exhaust from an affected boiler shall be determined by a qualified observer.

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

- a. Total natural gas usage for each affected boiler (mmscf/month and mmscf/year);
- b. Total residual fuel usage for each affected boilers (gal/month and gal/year);
- c. The sulfur content (in wt. %) and the gross heating value of oil (mmBtu/lb) for each shipment of residual fuel oil used in the affected boilers;

- d. Monthly and annual aggregate SO₂, PM, NO_x, VOM and CO emissions, based on fuel consumption and the applicable emission factors from Condition 7.1.12(d) with supporting calculations.

7.7.10 Reporting Requirements

- a. If there is an exceedance of the requirements of this permit by an affected boiler, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act.]
- b. If the sulfur content of residual fuel oil exceeds the limit specified in Condition 7.7.5(b), the Permittee shall submit a report within 30 days after receipt of a noncompliant shipment of residual fuel oil.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected boilers identified in Condition 7.7.2 without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Improvements to associated control devices.

7.7.12 Compliance Procedures

- a. Compliance with Conditions 7.7.3(d) is assumed to be achieved by the practices inherent in operation of a natural gas-fired boiler, thus no compliance procedures are set in this permit addressing this regulation.
- b. Compliance with Condition 7.7.3(c), shall be based on the recordkeeping requirements in Condition 7.7.9 and the following formula:

$$\text{SO}_2 \text{ emissions (lb/mmBtu)} = (2 \text{ SO}_2/\text{S}) \times (\text{weight percent sulfur in the fuel})/(\text{gross heating value of oil, mmBtu/lb}).$$

- c. Compliance with Condition 7.7.5(b), shall be based on recordkeeping requirements in Condition 7.7.9(c).
- d. To determine compliance with Condition 5.5.1 and 5.5.3(b), emissions from the affected boilers shall be based on the emission factors and formulas listed below:

<u>Pollutant</u>	Natural Gas Emission Factor (lb/mmscf)
SO ₂	0.6
PM	7.6
NO _x	100
CO	84

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Table 1.4-1, and Table 1.4-2 AP-42, 5th Edition, March 1998.

<u>Pollutant</u>	Fuel Oil #6 Emission Factor (lb/10 ³ gal)
SO ₂	157(S)
PM	0.0105 ^a
NO _x	67
VOM	1.04
CO	5

Where S is the weight percent of sulfur in the oil

There are the emission factors for uncontrolled fuel oil combustion in utility boilers, normal firing, Table 1.3-1 and Table 1.3-3, AP-42, 5th Edition, October 1996.

Natural gas boiler emissions (lb/mo) = (boiler natural gas consumption, mmscf/mo) x (the applicable emission factor, lb/mmscf).

Fuel oil #6 boiler emissions (lb/mo) = (fuel oil #6 consumption, gal/mo) x (the applicable emission factor, lb/10³ gal).

^a PM factor revised in May 1998; units are lb/mmBtu

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 1, 2000 unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

- a. The changes do not violate applicable requirements;

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

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

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

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

8.6.2 Test Notifications

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

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

8.6.3 Test Reports

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

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

8.6.4 Reporting Addresses

- a. Unless otherwise specified in a particulate provision, 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

v. Cook County Environmental Control Dept.

Attn: Bill Franek
69 West Washington Street, Suite 1900
Chicago, Illinois 60602-3004

- 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 201 or Part 203 or 40 CFR 52.21 ("Title I provisions") and included in this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, such 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)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.2 Attachment 2 - List of Tanks

TABLE 1-1

Tank No.	Year Built	Capacity (Gal)	Current Usage	
			Material	Vapor Pressure (psia at 70°F)
1-8	Pre-1972	15,000	AD 1100, 1220, 1321, 1538, 2140	0.3
9	1991	15,000	RD-1541	0.06
10	1994	20,000	Organic Solvent	0.29
11-13	1994	20,000	Organic Solvent	0.27
14-26	Pre-1972	4,000	Drop Tanks	1.5
27-28	Pre-1972	20,000	Organic Solvent	0.05
29	Pre-1972	20,000	Organic Solvent	0.57
30	Pre-1972	20,000	Alkabize	1.25
32-35	Pre-1972	5,400	Coating	1.03

10.3 Attachment 3 - Explanation of Aggregate Limit on Plant VOM Emissions

The current limit was determined in accordance with the Emission Reduction Market System (ERMS)

The starting point for determination of a source's baseline emissions is its average actual emissions during two representative years.

$$\begin{array}{r} 2,610.5 \\ + 7.5 \\ \hline 2,618 \\ + 851.9 \\ - 500 \\ - 178 \\ \hline 2,791.9 \end{array}$$

These baseline emissions are increased by 851.9 tons/year to account for voluntary overcompliance, resulting from improvements in the control systems on two coating lines after 1990.

Baseline emissions are also adjusted to account for the Permittee's mandatory reduction to provide 178 tons of internal offsets for the VOM emissions of new Coating Line 6G which is permitted for 592.4 tons/yr of VOM. The required reduction was 178 ton/yr. ($592.4 \times 1.3 = 770.1$, $592.4 - 770.1 = -177.7$ tons/year).

The baseline emissions also reflect the Permittee's voluntary reduction in VOM emissions by 500 tons/year to contribute toward attainment (200 tons/year) and to provide a supply of emission offsets to the City of Chicago for economic development activity (300 tons/year).

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I. INTRODUCTION

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

The Tape Manufacturing Division of 3M Company manufactures tape by applying coatings to paper and plastic substrates. The coating lines emit VOM from the solvent in the coating. The VOM is controlled by afterburners (thermal oxidizers). In addition, the source stores solvents and mixes the solvents with rubber or resin to make much of the adhesive coatings used in the coating lines. Steam for process use is generated by three gas-fired boilers with fuel oil as a backup fuel.

II. EMISSION UNITS

Significant emission units at this source areas follows:

Emission Unit	Description	Date Constructed ^a	Emission Control Equipment
1G	Tape Coating Line	Pre-1972	Afterburner
3G	Tape Coating Line	Pre-1972	Afterburner
4G	Tape Coating Line	Pre-1972	Afterburner
5G	Tape Coating Line	Pre-1972	Afterburner
6G	Tape Coating Line	1995**	Afterburner
2H	Tape Coating Line	Pre-1972	Afterburner
3H	Tape Coating Line	Pre-1972	Afterburner
4H	Tape Coating Line	Pre-1972	Afterburner
5H	Tape Coating Line	Pre-1972	Afterburner
6H	Tape Coating Line	Pre-1972	None
H-Wing Churns (8 Units) G-Wing Churns (9 Units)	Coating Line Churns	Pre-1972	None
Moguls Nos. 2, 4, and 6	Three Moguls	Pre-1972	Afterburner (One Product Only, for Odor Control)
Blenders Nos. 5N, 7N, 7S, 9N, 9S, 11N, and 11S	Seven Blenders, Each Equipped with Reflux Condensers	Pre-1972	None
Room 7 Churns (7 Units) Room 12 Churns (5 Units)	Compounding Churns	Pre-1972	None
Tanks 1-8, 14-30, 32-35	Storage Tanks	Pre-1972	Submerged Loading Pipe
Tank 9	Storage Tank	1991	Submerged Loading Pipe

Emission Unit	Description	Date Constructed ^a	Emission Control Equipment
Tanks 10-13	Storage Tanks	1994	Submerged Loading Pipe
Fabric Coater	Fabric Coater	1992	None
Milling Line Equipment #83	Rubber Milling System Including Banbury Mixer, Conveyors, Extruder, Pellet Cutter and Pellet Cooler	Pre-1972	Baghouses on Banbury Mixer and Pellet Cooler
6H Adhesive Compounding	Hot Melt Adhesive Compounding Area Including Rubber or Resin Hopper/Feeders, Resin Melt Tanks, Hold Tanks, Extruder and Scrap Storage	1979	One Baghouse for Hopper/Feeders
11J Extrusion Line	Extrusion Line and Associated Resin Silos, Hopper, Extruder, Corona Treater and Scrap Grinder	1993	Bin Filters on Silos, Baghouse on Extruder Inlet and Ozone Destructor on Corona Treater
Air Conveying Equipment (5)	Pneumatic Systems Moving Rubber and Resin	1990	Filters
IN-1	Solid Waste Incinerator with Waste Heat Boiler	1984	Baghouse BGH-1
BLR-1	Natural Gas Fired Boiler with Fuel Oil #6 Back-Up	1951	None
BLR-2	Natural Gas Fired Boiler with Fuel Oil #6 Back-Up	1951	None
BLR-3	Natural Gas Fired Boiler with Fuel Oil #6 Back-Up	1956	None

^a Date constructed is for emission unit only, control equipment may have been added at a later date.

** Existing thermal oxidizer, originally installed in 1989 on Coating Line 2G, which was removed from operation when Line 6G was installed.

III. EMISSIONS

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

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	4,000
Sulfur Dioxide (SO ₂)	218
Particulate Matter (PM)	147
Nitrogen Oxides (NO _x)	227
HAP, not included in VOM or PM	---
TOTAL	4,592

This permit is a combined Title I/CAAPP permit that 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 by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

IV. APPLICABLE EMISSION STANDARDS

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

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

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

V. PROPOSED PERMIT

CAAPP

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

Title I

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

Because this source is located in the Chicago ozone non-attainment area and emits volatile organic material (VOM), the permit includes conditions to implement the Emissions Reduction Market System (ERMS). The ERMS is a market-based program designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as further described in Section 6.0 of the permit. The permit contains the Illinois EPA's determination of the source's baseline emissions and allotment of trading units under the ERMS, and identifies units not subject to further reductions. The permit also provides that the source must begin to operate under the ERMS following the initial issuance of allotment trading units to the source. This will occur for the 2000 seasonal allotment period (rather than the 1999 season as originally intended by the ERMS) due in part to delays in the initial issuance of CAAPP Permits. These delays, which have occurred nationally, are attributable to a variety of causes including the unforeseen complexity of processing these permits and gaps in national guidance. Even though operation under the ERMS will not officially start until the 2000 seasonal allotment period, detailed recordkeeping and reporting of seasonal emissions was required beginning in 1998, which will document emissions reductions achieved by sources in 1999 in preparation for the ERMS.

VI. REQUEST FOR COMMENTS

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

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 164.

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