

217/782-2113

"REVISED"  
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE

3M  
Attn: Mike Kemen  
Building 42-2E-27  
Post Office Box 33331  
St. Paul, Minnesota 55133-3331

|   |  |
|---|--|
| <u>Application No.:</u> 96030133  | <u>I.D. No.:</u> 161807AAA                             |
| <u>Applicant's Designation:</u>   | <u>Date Received:</u> March 7, 1996                    |
| <u>Operation of:</u> 3M Film and Materials Resource Division              |  |
| <u>Date Issued:</u> October 20, 2003                                      | <u>Expiration Date</u> <sup>2</sup> : October 20, 2008 |
| <u>Source Location:</u> 22614 Route 84 North, Cordova, Rock Island County |  |
| <u>Responsible Official:</u> David P. Boaz, Plant Manager                 |  |

This permit is hereby granted to the above-designated Permittee to OPERATE a Film and Materials Resource production plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: January 9, 2005  
Revision Date Issued: September 11, 2006  
Purpose of Revision: Significant Modification

This significant modification is for the primary purpose of limiting HAP emissions so that the source becomes a minor source of HAPs and therefore not subject to several NESHAPs that have future compliance dates. To achieve the goal of becoming a minor source of HAPs, several construction permits for control equipment or emission reduction methods are being incorporated into this permit.

This revised permit includes several variable limits or modes of operation. For instance, the source is not yet a minor source of HAPs so HAP emission are not currently limited to minor source status. However, it is specified that the source must be minor for HAPs prior to the compliance date for several NESHAPs with future compliance dates. Note that becoming minor for HAPs in the future does not affect applicability of several NESHAPs that are already applicable. These are listed in Condition 7.1.3.

It is also specified that some of the control equipment being installed for the discretionary purpose of reducing HAP emissions and the control equipment may be removed or not operated if the source becomes major for HAPs again in the future and thus subject to one or more new NESHAPs but that applicable NESHAP does not require control of the specific equipment on which the control is located. For example, a storage tank may be small enough not to require control equipment by a NESHAP, but the Permittee installed it to assist in achieving minor HAP source status.

The specific NESHAPs that the Permittee is attempting to avoid MACT requirements are 40 CFR 63 Subpart EEEE (Organic Liquids Distribution), 40 CFR 63 Subpart FFFF (Miscellaneous Organic Chemical Manufacturing), Subpart HHHHH (Miscellaneous Coating Manufacturing), Subpart ZZZZ (Reciprocating Internal Combustion Engines), and Subpart DDDDD (Industrial, Commercial and Institutional Boilers and Process Heaters). These rules have different compliance dates. If the source is not minor for HAPs by December 11, 2006 Subpart HHHHH will become an applicable requirement and likewise for Subpart EEEE by February 5, 2007, Subpart FFFF by May 10, 2008, Subpart ZZZZ by June 15, 2007, and Subpart DDDDD by September 13, 2007.

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 2  
USEPA

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

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

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1.0 SOURCE IDENTIFICATION

1.1 Source

3M Cordova - Film and Materials Resource  
22614 Route 84 North  
Cordova, Illinois 61242  
309/654-2291

I.D. No.: 161807AAF  
Standard Industrial Classification: 2899, Chemical Preparations  
not elsewhere classified

1.2 Owner/Parent Company

3M  
3M Center  
ET&S, Building 42-2E-27, PO Box 33331  
St. Paul, Minnesota 55133-3331

1.3 Operator

3M Cordova - Film and Materials Resource  
22614 Route 84 North  
Cordova, Illinois 61242

David Schulze  
309/654-2291 Ext. 1233

1.4 General Source Description

The 3M Cordova Film and Materials Resource Division (3M) manufacturing facility produces numerous chemical products. These products are adhesives, resins, fluorochemicals, and other specialty chemicals. Some products are only made once or twice per year in small quantities while others are produced almost year around in large quantities. Production is by batch operations and semi-continuous operations. Almost no equipment is dedicated to making a specific product. Most every production unit is called upon to make a wide variety of products. A basic production unit, referred to as a burden center, consists of a key piece of equipment such as a chemical reactor and various ancillary parts. These ancillary pieces of equipment are stationary but may be reconfigured in a variety of ways, i.e. using flexible hoses, and used as part of another burden center. Ancillary pieces of equipment may include one or more of the following types of equipment: an overhead condenser, receiver, weigh tank, or a vacuum system.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

|                  |  |
|------------------|--|
| Act              | Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]   |
| AP-42            | Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711 |
| ACMA             | Alternative Compliance Market Account  |
| ATUs             | Allotment Trading Units  |
| 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   |
| CAM              | Compliance Assurance Monitoring  |
| CFR              | Code of Federal Regulations  |
| CO               | Carbon Monoxide  |
| ERMS             | Emission Reduction Market System   |
| °F               | degrees Fahrenheit   |
| ft <sup>3</sup>  | cubic foot   |
| FTIR             | Fourier Transform Infrared   |
| gal              | gallon   |
| gm               | gram   |
| gr/scf           | Grain per standard cubic foot  |
| HAP              | Hazardous Air Pollutant  |
| Hp               | horse power  |
| hr               | hour   |
| IAC              | Illinois Administrative Code   |
| I.D. No.         | Identification Number of Source, assigned by Illinois EPA  |
| Illinois EPA     | Illinois Environmental Protection Agency   |
| °K               | degrees Kelvin   |
| Kg               | kilogram   |
| KW               | Kilowatts  |
| lb               | Pound  |
| MACT             | Maximum Available Control Technology   |
| mmcf             | Million cubic feet   |
| MG               | Megagram   |
| M                | Meter  |
| mmBtu            | Million British thermal units  |
| mo               | month  |
| MW               | Megawatts  |
| NONVOM           | See Definition in Condition 5.2.8  |
| NO <sub>x</sub>  | Nitrogen Oxides  |
| NSPS             | New Source Performance Standards   |
| OM               | Organic Material   |
| PM               | Particulate Matter   |
| PM <sub>10</sub> | Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods  |
| ppm              | Parts per million  |
| PSD              | Prevention of Significant Deterioration  |
| psia             | pounds per square inch absolute  |

|                 |   |
|-----------------|---|
| REAP            | Regulatory Environmental Audit Program  |
| RMP             | Risk Management Plan  |
| scf             | standard cubic foot   |
| SO <sub>2</sub> | Sulfur Dioxide  |
| SOCMI           | Synthetic Organic Chemical Manufacturing Industry   |
| T               | Ton   |
| T1              | Title I - identifies Title I conditions that have been carried over from an existing permit   |
| T1N             | Title I New - identifies Title I conditions that are being established in this permit   |
| T1R             | Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit |
| USEPA           | United States Environmental Protection Agency   |
| VOL             | Volatile Organic Liquid   |
| VOM             | Volatile Organic Material   |
| wt.             | weight  |
| yr              | year  |

### 3.0 INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

1 Cell Pack Welding Unit  
20-73 and 30-09 Systems Particulate Loading<sup>a</sup>,  
Controlled by Dust Filters  
Building 3 Marion Mixer<sup>a</sup>, Controlled by Baghouse and  
Dust Collector  
Building 3 Drumming<sup>a</sup>, Dust Collector

<sup>a</sup> These units are controlled by the indicated control equipment, but the particulate emissions in the absence of control are less than 1 lb/hr

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

3 Maintenance Welding Units  
1 Rotary Vacuum Dryer in Building 3  
1 Cumberland grinder with dust collector  
1 Packaging Station

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

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

14 Heating and ventilating units (<2.5 mmBtu/hr Natural gas firing)

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with

soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

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

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

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

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

### 3.2 Compliance with Applicable Requirements

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

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

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

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

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12) (b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

| Emission Unit     | Description                        | Date Constructed | Emission Control Equipment |
|-------------------|------------------------------------|------------------|----------------------------|
| Building 2        |                                    |                  |                            |
| Small Packaging   | Tanks and Columns for Purification | May, 2002        | None                       |
| 2-4 System BC-4T  | TDX Pouch Process                  | July, 1997       | None                       |
| Building 3        |                                    |                  |                            |
| 3-1 System BC-3A  | 3-1-A-1 Reactor                    | February, 1970   | None                       |
| 3-1 System BC-2A  | 3-1-A-4 Receiver                   | November, 1969   | None                       |
| 3-2 System BC-3B  | 3-2-A-1 Reactor                    | December, 1970   | None                       |
| 3-2 System BC-2B  | 3-2-A-2 Reactor                    | December, 1970   | None                       |
| 3-3 System BC-3C  | 3-3-A-1 Reactor                    | June, 1973       | None                       |
| 3-4 System BC-2D  | 3-4-A-7 Reactor                    | September, 1969  | None                       |
| 3-4 System BC-3D  | 3-4-A-1 Reactor                    | September, 1969  | None                       |
| 3-4 System BC-3D  | 3-4-A-2 Receiver                   | September, 1969  | None                       |
| 3-5 System BC-3E  | 3-5-A-3 Reactor                    | October, 1973    | None                       |
| 3-5 System BC-1E  | 3-5-E-1 Conical Dryer              | July, 1970       | None                       |
| 3-6 System BC-3F  | 3-6-A-1 Reactor                    | January, 1993    | None                       |
| 3-6 System BC-2F  | 3-6-A-2 Receiver                   | January, 1970    | None                       |
| 3-7 System BC-3G  | 3-7-A-1 Reactor                    | January, 1985    | None                       |
| 3-7 System BC-2G  | 3-7-A-2 Reactor                    | January, 1985    | None                       |
| 3-8 System BC-3H  | 3-8-A-1 Reactor                    | August, 1974     | None                       |
| 3-9 System BC-3J  | 3-9-A-1 Reactor                    | October, 1974    | None                       |
| 3-9 System BC-2J  | 3-9-A-2 Receiver                   | September, 1974  | None                       |
| 3-10 System BC-3K | 3-10-A-1 Reactor                   | December, 1974   | None                       |
| 3-11 System BC-3L | 3-11-A-1 Reactor                   | January, 1985    | None                       |
| 3-11 System BC-2L | 3-11-A-2 Receiver                  | December, 1973   | None                       |
| 3-12 System BC-3M | 3-12-A-1 Reactor                   | April, 1977      | None                       |

| Emission Unit                      | Description  | Date Constructed                                       | Emission Control Equipment |
|------------------------------------|--|--|----------------------------|
| 3-12 System<br>BC-2M               | 3-12-A-2 Receiver  | December, 1973   | None                       |
| 3-13 System<br>BC-3N               | 3-13-A-1 Reactor   | April, 1975  | None                       |
| 3-13 System<br>BC-2N               | 3-13-A-2 Reactor   | May, 1975  | None                       |
| 3-14 System<br>BC-3P               | 3-14-A-1 Reactor   | August, 1987   | None                       |
| 3-14 System<br>BC-2P               | 3-14-A-2 Reactor   | December, 1987   | None                       |
| 3-21 System<br>BC-1S, 4R and<br>1R | 3-21-A-1 Pony Tub<br>3-21-A-2 Cowles Tank<br>3-21-E-1 Roll Mill<br>3-21-E-2 No. Pony Mixer<br>3-21-E-3 So. Pony Mixer<br>3-21-E-8 Homo Mixer<br>3-21-E-9 Mixer<br>3-21-E-12 Drum Tumbler | June, 1970<br>Except:<br>E-8 = N/A<br>E-12 = May, 1992 | None                       |
| 3-25 System<br>BC-75               | 3-25-E-1 Double Drum Dryer,<br>and Corresponding Hold and<br>Disperser Tanks   | April, 1970  | None                       |
| 3-26 System<br>BC-43               | 3-26-E-1 Double Drum Dryer,<br>and Corresponding Hold and<br>Disperser Tanks   | March, 1974  | None                       |
| 3-27 System<br>BC-50               | 3-27-E-1 Double Drum Dryer,<br>and Corresponding Hold and<br>Disperser Tanks   | April, 1987  | None                       |
| 3-32 System<br>BC-6B               | 3-32-A-1 Reactor   | June, 1989   | None                       |
| 3-32 System<br>BC-5B               | 3-32-A-2 Receiver  | October, 1977  | None                       |
| 3-32 System<br>BC-4B               | 3-32-E-4 Flaker  | October, 1972  | Dust Collector<br>3-32-E-9 |
| 3-32 System<br>BC-7B               | 3-32-E-7 Flaker  | August, 1999   | Dust Collector<br>3-32-C-7 |
| 3-34 System<br>BC-1D               | 3-34-E-1 Dryer   | December, 1973   | None                       |
| 3-40 System<br>BC-6K               | 3-40-A-1 Reactor   | January, 1989  | None                       |
| 3-40 System<br>BC-5K               | 3-40-A-2 Receiver  | April, 1970  | None                       |
| 3-43 System<br>BC-5N               | 3-43-C-1 Eimco Filter  | January, 1981  | None                       |
| 3-13 System<br>BC-2N               | 3-57-A-1 Thru 4<br>Tanks   | A-1 and A-2: 1997<br>A-3 and A-4: 1999                 | None                       |
| 3-62 System<br>BC-4G               | 3-62-C-1 S Press   | December 1987  | None                       |
| 3-66 System<br>BC-4F               | 3-66-A-1 Reactor<br>3-66-A-2 Receiver  | April, 1970  | None                       |
| 3-68 System<br>BC-6H               | 3-68-A-1 Reactor   | April, 1974  | None                       |

| Emission Unit               | Description   | Date Constructed  | Emission Control Equipment             |
|-----------------------------|---|---|--|
| Building 4                  |   |   |  |
| 4-1 System<br>BC-41         | 4-1-A-1 Reactor   | September, 1970   | None                                   |
| 4-1 System<br>BC-42         | 4-1-A-2 Receiver  | September, 1970   | None                                   |
| 4-2 System<br>BC-52         | 4-2-A-1 Reactor   | September, 1970   | Scrubber (NH <sub>3</sub> )<br>4-2-C-5 |
| 4-32 System<br>BC-53        | 4-32-A-1 Reactor  | September, 1970   | None                                   |
| Building 20 <sup>a, b</sup> |   |   |  |
| 20-01 System<br>BC-01       | Electrochemical Cells<br>20-1-A-1 Thru 6,<br>20-1-A-21, 20-1-A-22 | November, 1975  | Scrubbers*                             |
| 20-02 System<br>BC-02       | Electrochemical Cells<br>20-2-A-1 Thru 12                         | January, 1997<br>Except:<br>A-3, 6, and 12 =<br>October, 1998 | Scrubber*                              |
| 20-03 System<br>BC-03       | Electrochemical Cells<br>20-3-A-1 Thru 12                         | January, 1987<br>Except:<br>A-3 = August, 2001                | Scrubbers*                             |
| 20-04 System<br>BC-04       | Electrochemical Cells<br>20-4-A-1 Thru 3                          | June, 1992  | Scrubbers*                             |
| 20-11 System<br>BC-11       | 20-11-A-7 Column and<br>Reboiler                                  | January, 1992   | Scrubber*                              |
| 20-12 System<br>BC-12       | 20-12-A-1 Distillation<br>Column                                  | January, 1992   | Scrubber*                              |
| 20-21 System<br>BC-21       | 20-21-A-4 Silica Gel Column                                       | February, 1999  | None                                   |
| 20-22 System<br>BC-22       | 20-22-D-1 Discotherm  | January, 1990   | Scrubber*                              |
| 20-33 System<br>BC-33       | 20-33-A-1, 2, 13<br>Distillation Columns                          | A-1 = May, 1995<br>A-2 = May, 1995<br>A-13 = July, 1996       | Scrubber*                              |
| 20-34 System<br>BC-34       | Dessicant Dryer Columns<br>20-34-A-1, 20-34-A-2                   | November, 1998  | None                                   |
| 20-41 System<br>BC-41       | 20-41-A-1 Reactor   | June, 1996  | Scrubber*                              |
| 20-50 System<br>BC-51       | 20-50-A-1 Reactor   | January, 1981   | Scrubber*                              |
| 20-60 System<br>BC-61       | 20-60-A-1 Reactor   | November, 1982  | Scrubber*                              |
| 20-66 System<br>BC-66       | 20-66-B-11, 21, 41, 51<br>Distillation Columns                    | November, 1998  | None                                   |
| 20-70 System<br>BC-70       | 20-70-A-1 Reactor   | January, 1997   | Scrubber*                              |
| 20-71 System<br>BC-71       | 20-71-A-1 Reactor   | January, 1997   | Scrubber*                              |
| 20-72 System<br>BC-72       | Columns 20-72-A-1,<br>20-72-A-11, 20-72-B-11,                     | January, 1997   | None                                   |

| Emission Unit            | Description   | Date Constructed | Emission Control Equipment  |
|--------------------------|---|------------------|---|
| 20-73 System<br>BC-73    | Tanks 20-73-A-1, 20-73-A-2,<br>20-73-A-3, 20-73-A-6,<br>20-73-A-7 | March, 1997      | Scrubber* Dust<br>Collector<br>20-73-C-2 Listed<br>as Insignificant<br>in 3.1   |
| 20-90 System<br>BC-90    | 20-90-A-1 and 11<br>Distillation Columns                          | February, 2002   | None  |
| 20-93 System             | 20-93-A-1 Thru 6 Finishing<br>Columns                             | June, 1997       | None  |
| 20-95 System<br>BC-95    | 20-95-A-1 Wash Column   | February, 1997   | None  |
| Building 20<br>Scrubbers | Building 20 Equipment Can be<br>Served by Various Scrubbers.      |                  | 20-31-C-2,<br>20-31-C-5,<br>20-2-C-5,<br>20-3-C-3,<br>20-3-C-10,<br>20-31-C-3,<br>20-33-C-7,<br>20-41-C-1,<br>20-50-D-9,<br>20-60-D-5,<br>20-70-C-1,<br>20-71-C-1,<br>20-73-C-1,<br>20-31-C-1 |
| <b>Building 23</b>       |   |                  |   |
| 23-01 System<br>BC-31    | 23-1-A-1 Reactor  | September, 1988  | None  |
| 23-02 System<br>BC-91    | 23-2-B-3 Wiped Film<br>Evaporator                                 | April, 1999      | None  |
| 23-03 System<br>BC-33    | 23-3-A-1 Reactor  | October, 1985    | None  |
| 23-03 System<br>BC-23    | 23-3-A-2 Receiver   | October, 1985    | None  |
| 23-04 System<br>BC-89    | 23-4-C-1 Wiped Film<br>Evaporator                                 | August, 1995     | None  |
| 23-05 System<br>BC-35    | 23-5-A-1 Reactor  | June, 1986       | None  |
| 23-05 System<br>BC-15    | 23-5-E-3 LUWA Evaporator  | August, 1989     | None  |
| 23-06 System<br>BC-6A    | 23-6-A-1 Reactor  | January, 1996    | None  |
| 23-07 System<br>BC-16    | 23-7-A-1 Reactor  | April, 1991      | None  |
| 23-16 System<br>BC-6B    | 23-16-A-1 Packed Columns  | October, 1995    | None  |
| 23-17 System<br>BC-34    | 23-17-A-1 Reactor   | July, 1999       | None  |
| 23-31 System<br>BC-38    | 23-31-A-1 Reactor   | July, 1999       | None  |

| Emission Unit               | Description   | Date Constructed   | Emission Control Equipment  |
|-----------------------------|---|--|---|
| 23-32 and 34 Systems        | Weigh and Hold Tanks<br>23-32-A-3, 4, 5<br>23-34-A-3 and 4        | July, 1999<br>Except: 23-34-A-3<br>= May, 2000               | None  |
| 23-35 System<br>BC-39       | 23-35-A-1 Reactor   | February, 2000   | None  |
| 23-37 System<br>BC-36       | 23-37-A-1 Reactor<br>Encapsulator                                 | April, 1991  | None  |
| 23-38 System<br>BC-08       | 23-38-A-1 Wiped Film<br>Evaporator                                | June, 1997   | None  |
| Building 30 <sup>a, b</sup> |   |  |   |
| 30-01 System<br>BC-05       | 30-1-A-1 (-12) Twelve Cell<br>System                              | A-1 thru 10, A-12:<br>March, 1998<br>A-11: November,<br>2001 | Scrubbers*  |
| 30-02 System<br>BC-06       | 30-2-A-1 (-12) Twelve Cell<br>System                              | March, 1998  | Scrubbers*  |
| 30-06 System<br>BC-80       | 30-6-A-1 & 11, 13-19<br>Distillation Column and<br>Silica Columns | August, 1999   | None  |
| 30-07 System<br>BC-40       | 30-7-A-1 and 2, 11 and 12<br>Columns                              | May, 1998  | Scrubber*   |
| 30-08 System<br>BC-81       | 30-8-A-1 Reactor  | November, 1999   | Scrubbers*  |
| 30-09 System                | 30-9-A-1, 2 and 3 Tanks   | May, 1998  | Scrubber*<br><br>Dust Collector<br>30-9-C-2<br>Listed as<br>Insignificant in<br>3.1         |
| 30-20 System                | 30-20-A-1 Refrigeration<br>System                                 | April, 1998  | None  |
| 30-14 System                | 30-14-A-1, A-10 and A-11<br>Columns                               | September, 2002  | None  |
| 30-37 System                | Weigh Tank 30-37-A-1  | November, 1998   | Scrubber*   |
| 30-61 System<br>BC-23       | 30-61-A-3 Discotherm<br>Evaporator                                | July, 1998   | Scrubber*   |
| 30-67 System<br>BC-45       | 30-67-A-1 and 11<br>Distillation Columns                          | November, 1999   | Scrubber*   |
| Building 30<br>Scrubbers    | Building 30 Equipment Can be<br>Served by Various Scrubbers.      |  | 30-1-C-4,<br>30-1-C-12,<br>30-2-C-4,<br>30-2-C-12,<br>30-09-C-4,<br>30-08-C-1,<br>30-61-C-1 |
| Building 68                 |   |  |   |
| Building 68<br>System       | 68-1-C-1 Repackaging Unit<br>with Dust Collector                  | April, 2000  | Dust Collector<br>68-1-C-1  |
| Other                       |   |  |   |

| Emission Unit            | Description   | Date Constructed | Emission Control Equipment  |
|--------------------------|---|------------------|---|
| BIS A                    | Bisphenol A Storage and Transfer/Silo   | November, 1992   | Dust Collector<br>1-1-C-7,<br>3-98-C-10,<br>3-98-C-11,<br>3-98-C-6,<br>3-98-C-9 |
| Storage Tanks            | Chemical or Gasoline Storage Tanks  | See Attachment 2 | Most Are None but See Attachment 2  |
| Boiler #1                | Gas-Fired Boiler with #6 Oil Standby Fuel, Firing Rate: 50 mmBtu/hr                                   | 1986             | None  |
| Boiler #2                | Gas-Fired Boiler with #6 Oil Standby Fuel, Firing Rate: 50 mmBtu/hr                                   | 1986             | None  |
| Boiler #3                | Gas-Fired Boiler with #6 Oil Standby Fuel, Firing Rate: 75 mmBtu/hr                                   | 1986             | None  |
| Reactor Burner for BC-41 | 3.8 mmBtu/hr  | Pre-1980         | None  |
| Loading Operations       | Various Units:<br>10 Loading Racks, 6 Fixed Roof Storage Tanks, Loading Directly From Process Vessels | Pre-1972         | Five Loading Racks Vented to Flare  |
|                          | Fugitive VOM Emission Source  | ----             |   |

<sup>a</sup> All vents for chemical manufacturing process units requiring control by scrubbers in Buildings 20 and 30 can alternatively discharge to a voluntary thermal oxidizer or scrubbers.

<sup>b</sup> Buildings 20 and 30 have revisions to original construction permits issued in 2003 and therefore original construction dates are not relevant.

\* Equipment and scrubber pairings are flexible. Scrubbers listed are process exhaust scrubbers. Room and spot air scrubbers operated for industrial hygiene and safety reasons are not considered regulated emission control equipment.

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

This permit is issued based on the source requiring a CAAPP permit as a major source of VOM, SO<sub>2</sub>, NO<sub>x</sub> and currently (as of date of issuance of the significant modification) HAP emissions. See also Condition 5.5.2 with regard to future HAP major/minor source status.

### 5.2 Applicable Regulations

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

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

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

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

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- c. No person shall cause any single or multiple compartment effluent water separator which receives more of organic material from any equipment processing, refining, treating, storing or handling organic material unless such effluent water separator is equipped with air pollution control equipment capable of reducing by 85 percent or more the uncontrolled organic material emitted to the atmosphere. Exception: If no odor nuisance exists the limitations of this subparagraph shall not apply if the vapor pressure of the organic material is below 17.24 kPa (2.5 psia) at 294.3°K (70°F) [35 IAC 215.141(a)].

- d. No person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of volatile organic liquid with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions [35 IAC 215.142].

#### 5.2.3 Ozone Depleting Substances

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

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

#### 5.2.4 Risk Management Plan

- a. This stationary source, as define in 40 CFR Section 68.3, is subject to 40 CFR Part 68, the Accidental Release Prevention regulations [40 CFR 68.215(a) (1)].
- b. The owner or operator of a stationary source<sup>3</sup> shall revise and update the RMP submitted, as specified in 40 CFR 68.190.

#### 5.2.5.1 Future Regulations

- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71. If existing equipment becomes subject to 40 CFR Part 63 Subparts GGG, MMM or OOO during the term of this permit, they shall comply with all

applicable requirements without the need for a permit modification prior to permit renewal. These rules are cited in Section 7.1.

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

#### 5.2.5.2 NESHAP Requirements (MON)

- a. The final rule for Miscellaneous Organic Chemical Manufacturing under the NESHAP, 40 CFR 63 Subpart FFFF (40 CFR 63.2430 through 63.2550 plus Tables) was published on November 10, 2003. An existing source, such as operated by the Permittee, has until May 10, 2008 to achieve compliance with the rules as promulgated at that time. If a new chemical manufacturing process unit is constructed between now and November 10, 2006, or the existing process is reconstructed, the new or reconstructed unit must comply with the requirements upon startup. The standard only applies to units that use or produce HAPs. This standard will apply if the source remains a major source of HAPs but will not apply if the source becomes a minor source of HAPs prior to May 10, 2008
- b. There are a number of specific standards contained within the general rule such as for batch and continuous process vents, for storage tanks, for transfer racks, for heat exchange systems, for equipment leaks and for wastewater streams. In addition to the regular standards, there options for pollution prevention standards, emissions averaging and for an alternative standard. These standards must be complied with by May 10, 2008.
- c. As of the dates required by the rule, if applicable, the Permittee shall comply with the following:
  - i. The notification requirements of 40 CFR 63.2515 and the applicable requirements in 40 CFR Subpart A (63.7 to 63.9).
  - ii. The recordkeeping requirements of 40 CFR 63.2525.
  - iii. The reporting requirements of 40 CFR 63.2520.

- d. The chemical manufacturing process units that emit HAPs are also subject to the general requirements 40 CFR 63 Subpart A (63.1 to 63.15). One of these requirements for units that comply by use of control equipment is to have a Startup, Shutdown and Malfunction Plan as required by 40 CFR 63.6(e) (3) by the final compliance date.
- e. This NESHAP rule was described here in Section 5 but the actual equipment affected is in Section 7. At the time of initial notification, the Permittee must identify which equipment in Section 7 uses or produces HAPs and is thus affected by this rule.
- f. The Permittee shall certify compliance with the applicable requirements of Subpart FFFF as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required (2008).

#### 5.2.5.3 NESHAP Requirements (MCM)

- a. The final rule for Miscellaneous Coating Manufacturing under the NESHAP, 40 CFR 63 Subpart HHHHH (40 CFR 63.7980 through 63.8105 plus Tables) was published on December 11, 2003. An existing source, such as operated by the Permittee, has until December 11, 2006 to achieve compliance with the rules as promulgated at that time. If a new coating manufacturing process unit is constructed between now and December 11, 2006, or the existing process is reconstructed, the new or reconstructed unit must comply with the requirements upon startup. The standard only applies to units that use or produce HAPs. This standard will apply if the source remains a major source of HAPs but will not apply if the source becomes a minor source of HAPs prior to December 11, 2006.
- b. There are a number of specific standards contained within the general rule such as for process tanks, for storage tanks, for transfer operations, for heat exchange systems, for equipment leaks and for wastewater streams. In addition to the regular standards, there options for emissions averaging and for limiting the weight percent HAP in the coating products. These standards must be complied with by December 11, 2006 if the source is not a minor source of HAPs by that date.
- c. As of the dates required by the rule, if applicable, the Permittee shall comply with the following:

- i. The notification requirements of 40 CFR 63.8070 and the applicable requirements in 40 CFR Subpart A (63.7 to 63.9).
  - ii. The recordkeeping requirements of 40 CFR 63.8080.
  - iii. The reporting requirements of 40 CFR 63.8075 and Table 9.
- d. The chemical manufacturing process units that emit HAPs are also subject to the general requirements 40 CFR 63 Subpart A (63.1 to 63.15) as listed in 63.8095 and Table 10. One of these requirements for units that comply by use of control equipment is to have a Startup, Shutdown and Malfunction Plan as required by 40 CFR 63.6(e) (3) by the final compliance date.
  - e. This NESHAP rule was described here in Section 5 but the actual equipment affected is in Section 7. If the source becomes subject to this rule, the Permittee must identify which equipment in Section 7 uses or produces HAPs and is thus affected by this rule.
  - f. The Permittee shall certify compliance with the applicable requirements of Subpart HHHHH as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required (2006).

#### 5.2.5.4 NESHAP Requirements (OLD)

- a. The final rule for Organic Liquids Distribution under the NESHAP, 40 CFR 63 Subpart EEEE (40 CFR 63.2330 through 63.2406 plus Tables) was published on February 3, 2004. An existing source, such as operated by the Permittee, has until February 5, 2007 to achieve compliance with the rules as promulgated at that time. The standard only applies to units that store or transfer organic HAPs. One of the tables in Subpart EEEE lists the specific organic chemicals to which the standard applies.
- b. The three main standards or work practices contained within the general rule are for storage tanks, for transfer racks, and equipment leaks. These standards must be complied with by February 5, 2007 if the source is not a minor source of HAPs by that date.
- c. As of the dates required by the rule, if applicable, the Permittee shall comply with the following:

- i. The notification requirements of 40 CFR 63.2382 and the applicable requirements in 40 CFR Subpart A (63.7 to 63.9).
  - ii. The recordkeeping requirements of 40 CFR 63.2390.
  - iii. The reporting requirements of 40 CFR 63.2386.
- d. The organic liquid distribution units that emit HAPs are also subject to the general requirements 40 CFR 63 Subpart A (63.1 to 63.15). One of these requirements for units that comply by use of control equipment is to have a Startup, Shutdown and Malfunction Plan as required by 40 CFR 63.6(e) (3) by the final compliance date.
  - e. This NESHAP rule was described here in Section 5 but the actual equipment affected is in Section 7. At the time of initial notification, the Permittee must identify which equipment in Section 7 distribute HAP containing liquids and is thus affected by this rule.
  - f. The Permittee shall certify compliance with the applicable requirements of Subpart EEEE as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required (2007).

#### 5.2.5.5 NESHAP Requirements (RICE)

- a. The final rule for Reciprocating Internal Combustion Engines (commonly referred to as RICE) under the NESHAP, 40 CFR 63 Subpart ZZZZ was published on June 15, 2004. An existing source, such as operated by the Permittee, has until June 15, 2007 to achieve compliance with the rules as promulgated at that time.
- b. The only piece of equipment to which the RICE rule may apply if the source is not minor for HAPs by the applicable date are insignificant emission units in Section 3.1.3 of this permit).
- c. As of the dates required by the RICE rule, if applicable, the Permittee shall comply with the following:
  - i. The notification requirements of 40 CFR 63.6645 and the applicable requirements in 40 CFR Subpart A (63.7 to 63.9)
  - ii. The recordkeeping requirements of 40 CFR 63.6655.

- iii. The reporting requirements of 40 CFR 63.6650. A minimum of two semiannual compliance reports are required.
- d. This RICE operation is also subject to the general requirements 40 CFR 63 Subpart A (63.1 to 63.15). See Table 8 of the RICE.
- e. The Permittee shall certify compliance with the applicable requirements of Subpart ZZZZ as part of its annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required (2007) if the source is not a minor source of HAPs by that date.

#### 5.2.5.6 NESHAP Requirements (Industrial Boilers and Heaters)

The final rule for Industrial Boilers and Process Heaters under the NESHAP, 40 CFR 63 Subpart DDDDD, was published on September 13, 2004.

The boilers and oil heater operated by the Permittee (See Section 7.5) meet the definition of a "large gaseous fuel subcategory" under 40 CFR 63.7575 since the oil that is burned is only during periods of gas curtailment or gas supply emergencies and therefore pursuant to 40 CFR 63.7506(b) they are only subject to the initial notification requirements in 40 CFR 63.9(b) (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, startup, shutdown and malfunction plan, site-specific monitoring plans, recordkeeping and reporting requirements of 40 CFR 63 Subpart DDDDD or any other requirements in Subpart A of Part 63).

Note that if the Permittee becomes a nonmajor source of HAPs [see Condition 5.5.2(d)] prior to the notification requirement then even the notification will not be required.

#### 5.2.6 Episode Action Plan

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

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
  - i. Illinois EPA, Compliance Section; and
  - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
  - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

#### 5.2.7 CAM Plan

Upon application for renewal of the initial CAAPP permit, the source must submit a Compliance Assurance Monitoring (CAM) for each affected pollutant-specific emissions unit that is subject to 40 CFR Part 64, CAM for Major Stationary Sources. The source must also submit a CAM plan in the event of a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit, which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

#### 5.2.8 Definition

- a. For the purpose of this permit, other organic material (NONVOM) is organic material as defined in 35 IAC 211.4250 that does not qualify as volatile organic material, hazardous air pollutants, ozone depleting substances or photochemically reactive organic material.
- b. For purposes of this permit, fluorides means fluorides as measured by USEPA Method 13 (40 CFR 60, Appendix A), which would include organic compounds that are called "acid fluorides".

5.3 Non-Applicability of Regulations of Concern

This permit is issued based on the source not being subject to 35 IAC Part 218 or 219, because the source is not located in the Chicago or Metro-East Metropolitan areas.

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

| Pollutant                          | Tons/Year |
|------------------------------------|-----------|
| Volatile Organic Material (VOM)    | 1,010.10  |
| Sulfur Dioxide (SO <sub>2</sub> )  | 753.07    |
| Particulate Matter (PM)            | 94.26     |
| Nitrogen Oxides (NO <sub>x</sub> ) | 320.66    |
| HAP, not included in VOM or PM     | 53.19     |
| Total                              | 2,231.28  |

5.5.2 Emissions of Hazardous Air Pollutants

- a. Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are currently (as of the date of issuance of the significant modification) not set. This source is considered to be a major source of HAPs.
- b. Pursuant to Section 39.5(7) (a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined prior to December 11, 2006 or the source will be subject to the requirements of 40 CFR 63 Subpart HHHHH for Miscellaneous Coating Manufacturing. Note that for determining

applicability of the NESHAP rules, emissions of HAPs from insignificant emission units in Section 3 of this permit must be included in the calculation of minor source status.

- c. Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined prior to February 5, 2007 or the source will be subject to the requirements of 40 CFR 63 Subpart EEEE for Organic Liquids Distribution. Note that for determining applicability of the NESHAP rules, emissions of HAPs from insignificant emission units in Section 3 of this permit must be included in the calculation of minor source status.
- d. Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined prior to June 15, 2007 or the source will be subject to the requirements of 40 CFR 63 Subpart ZZZZ for Reciprocating Internal Combustion Engines. Note that for determining applicability of the NESHAP rules, emissions of HAPs from insignificant emission units in Section 3 of this permit must be included in the calculation of minor source status.
- e. Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined prior to September 13, 2007 or the source will be subject to the requirements of 40 CFR 63 Subpart DDDDD for Industrial Boilers and Process Heaters. Note that for determining applicability of the NESHAP rules, emissions of HAPs from insignificant emission units in Section 3 of this permit must be included in the calculation of minor source status.
- f. Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined prior to May 10, 2008 or the source will be subject to the requirements of 40 CFR 63 Subpart FFFF for Miscellaneous Organic Chemical Manufacturing. Note that for determining applicability of the NESHAP rules, emissions of HAPs from insignificant emission units in Section 3 of this permit must be included in the calculation of minor source status.
- g. Compliance with annual limits for b through f above, if applicable, 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). This running 12 month total condition only becomes effective when the source determines that it qualifies for minor HAP source status and thus the months prior do not have to be included. This condition is being imposed so that the source is not a major source of HAP emissions. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.5.4, 5.6, and 5.7.

#### 5.5.3 Other Source-Wide Emission Limitations

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

#### 5.5.4 HAP Testing to Verify Minor Source Status

If in the previous calendar year, emissions of HAPs exceeded 80% of major source threshold for individual or total HAPs (greater than 8 tons of a single HAP or greater than 20 tons of total HAPs), then the Permittee shall submit a plan to the Illinois EPA that outlines a proposal for verification of the HAP emission rate.

### 5.6 General Recordkeeping Requirements

#### 5.6.1 Emission Records

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

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

#### 5.6.2 Records for HAP Emissions

If the Permittee chooses to become a minor source of HAPs in order to avoid the applicability of either 40 CFR 63 Subparts EEEE, FFFF, HHHHH, ZZZZ and/or DDDDD, the Permittee shall maintain records of individual and combined HAP emissions on a monthly and annual basis for the emission units covered by Section 3 (Insignificant Emission Units) and Section 7 (Unit Specific Conditions

for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.5.2, pursuant to Section 39.5(7)(b) of the Act.

#### 5.6.3 Calculation Method for Records

For any records for an emission unit covered by this permit that are calculated using Emission Master™, the Permittee shall have available upon request by the Illinois EPA the methodology that is the basis for the calculation of emissions by the Emission Master™ software. For example, if the calculation uses an AP-42 emission factor or an engineering estimate, the equation and the variables that are used in the equation such as throughput in gallons or pounds, temperature(s), vapor pressure, pressure, etc. Once a calculation of emissions is made, the variable inputs do not have to be stored.

#### 5.6.4 Records for Operating Scenarios

N/A

#### 5.6.5 Retention and Availability of Records

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

### 5.7 General Reporting Requirements

#### 5.7.1 General Source-Wide Reporting Requirements

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

Opacity or emissions exceeding the allowable of Conditions 5.2.2 or 5.5.1.

5.7.2 The Permittee has expressed its intention to operate as a minor source of HAP prior to the applicability of the coating manufacturing MACT, although this permit has been written that it could still be major for HAPs on that applicability date and not become minor for HAPs until the OLD, MON, RICE and Boiler MACT become applicable. The Permittee must notify the Illinois EPA if it has not reached non-major status prior to the applicability date of any of these MACTs. This notification letter shall be sent to the Illinois EPA Permit Section and Compliance Section in Springfield and the Field Operations Office in Peoria.

5.7.3 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

- a. For the purpose of estimating VOM emissions from the tanks, the current version of the USEPA TANKS program is acceptable.
- b. For the purpose of estimating fugitive VOM emissions from leaking components at the source, the emission factors found in "1995 Protocol for Equipment Leak Emission Estimates" published by USEPA in November 1995 by the Emission Standards Division of DAQPS, "EPA-453-R-95-017" shall be used. Summaries of this lengthy document are also acceptable.
- c. For the purpose of estimating HAP emissions from equipment at the source, the vapor weight percent (based on a 1992 USEPA survey) of each HAP for each organic liquid times the VOM emissions contributed by that organic liquid is acceptable.

6.0 NOT APPLICABLE TO THIS PERMIT

## 7.0 UNIT SPECIFIC CONDITIONS

### 7.1 Chemical Manufacturing Process Units

#### 7.1.1 Description

3M Cordova Film and Materials Resource Division (3M) manufacturing facility produces numerous chemical products. These products are adhesives, resins, fluorochemicals, and other specialty chemicals. Some products are only made once or twice per year in small quantities while others are produced almost year around in large quantities. Production is by batch operations.

Almost no equipment is dedicated to making a specific product. Most every production unit is called upon to make a wide variety of products. 3M refers to these production units as burden centers. A basic burden center consists of a key piece of equipment such as a chemical reactor and various ancillary parts, which may include one or more of the following: an overhead condenser, receiver, weigh tank, a vacuum system, and/or pumps.

Within this manufacturing facility, each building contains multiple, flexible burden centers, which can be used to manufacture a variety of products. Each burden center has several different pieces of ancillary equipment. The equipment is modular, so it can be used in different ways, at different operating temperatures, and different pressures. It is part of the normal operations to hook up different pieces of equipment, and change equipment configurations, all during the course of making one product. Sometimes equipment is reconfigured across burden centers. For example, burden center #1 could consist of a reactor, receiver, and condenser. That same reactor can be used with a distillation column and is then considered burden center #2. For some batch products, this equipment reconfiguration may take place several times a day.

In the following list of equipment, only the key piece of equipment is listed, primarily reactors, columns and tanks for liquid materials, and dryers, evaporators and others for converting liquid to solids by evaporation or to handle the solid (powder or flake) material afterward. The ancillary pieces of equipment are not named but are covered by this permit. Ancillary pieces of equipment are listed in the permit application.

Condensers used with process equipment are not considered control equipment. The condensers used with production units are process condensers are integral to the process, are used to recover product, and they are not considered control devices. The equipment called electrochemical

cells is for electrochemical production of fluorinated products.

Some distillation columns are connected directly to a reactor while others are separate, that is they have a reboiler to supply heat.

The above description is for descriptive purposes only and is not enforceable.

7.1.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit      | Description                        | Emission Control Equipment |
|--------------------|------------------------------------|----------------------------|
| Building 2         |                                    |                            |
| Small Packaging    | Tanks and Columns for Purification | None                       |
| 2-4 System (BC-4T) | TDX Pouch Process                  | None                       |
| Building 3         |                                    |                            |
| 3-1 System BC-3A   | 3-1-A-1 Reactor                    | None                       |
| 3-1 System BC-2A   | 3-1-A-4 Receiver                   | None                       |
| 3-2 System BC-3B   | 3-2-A-1 Reactor                    | None                       |
| 3-2 System BC-2B   | 3-2-A-2 Reactor                    | None                       |
| 3-3 System BC-3C   | 3-3-A-1 Reactor                    | None                       |
| 3-4 System BC-2D   | 3-4-A-7 Reactor                    | None                       |
| 3-4 System BC-3D   | 3-4-A-1 Reactor                    | None                       |
| 3-4 System BC-3D   | 3-4-A-2 Receiver                   | None                       |
| 3-5 System BC-3E   | 3-5-A-3 Reactor                    | None                       |
| 3-5 System BC-1E   | 3-5-E-1 Conical Dryer              | None                       |
| 3-6 System BC-3F   | 3-6-A-1 Reactor                    | None                       |
| 3-6 System BC-2F   | 3-6-A-2 Receiver                   | None                       |
| 3-7 System BC-3G   | 3-7-A-1 Reactor                    | None                       |
| 3-7 System BC-2G   | 3-7-A-2 Reactor                    | None                       |
| 3-8 System BC-3H   | 3-8-A-1 Reactor                    | None                       |

| Emission Unit                      | Description  | Emission Control Equipment |
|------------------------------------|--|----------------------------|
| 3-9 System<br>BC-3J                | 3-9-A-1 Receiver   | None                       |
| 3-9 System<br>BC-2J                | 3-9-A-2 Reactor  | None                       |
| 3-10 System<br>BC-3K               | 3-10-A-1 Reactor   | None                       |
| 3-11 System<br>BC-3L               | 3-11-A-1 Reactor   | None                       |
| 3-11 System<br>BC-2L               | 3-11-A-2 Receiver  | None                       |
| 3-12 System<br>BC-3M               | 3-12-A-1 Reactor   | None                       |
| 3-12 System<br>BC-2M               | 3-12-A-2 Receiver  | None                       |
| 3-13 System<br>BC-3N               | 3-13-A-1 Reactor   | None                       |
| 3-13 System<br>BC-2N               | 3-13-A-2 Reactor   | None                       |
| 3-14 System<br>BC-3P               | 3-14-A-1 Reactor   | None                       |
| 3-14 System<br>BC-2P               | 3-14-A-2 Reactor   | None                       |
| 3-21 System<br>BC-1S, 4R and<br>1R | 3-21-A-1 Pony Tub<br>3-21-A-2 Cowles Tank<br>3-21-E-1 Roll Mill<br>3-21-E-2 No. Pony Mixer<br>3-21-E-3 So. Pony Mixer<br>3-21-E-8 Homo Mixer<br>3-21-E-9 Mixer<br>3-21-E-12 Drum Tumbler | None                       |
| 3-25 System<br>BC-75               | 3-25-E-1 Double Drum<br>Dryer, and Corresponding<br>Hold and Disperser Tanks   | None                       |
| 3-26 System<br>BC-43               | 3-26-E-1 Double Drum<br>Dryer, and Corresponding<br>Hold and Disperser Tanks   | None                       |
| 3-27 System<br>BC-50               | 3-27-E-1 Double Drum<br>Dryer, and Corresponding<br>Hold and Disperser Tanks   | None                       |
| 3-32 System<br>BC-6B               | 3-32-A-1 Reactor   | None                       |
| 3-32 System<br>BC-5B               | 3-32-A-2 Receiver  | None                       |
| 3-32 System<br>BC-4B               | 3-32-E-4 Flaker  | Dust Collector<br>3-32-E-9 |
| 3-32 System<br>BC-7B               | 3-32-E-7 Flaker  | Dust Collector<br>3-32-C-7 |
| 3-34 System<br>BC-1D               | 3-34-E-1 Dryer   | None                       |

| Emission Unit            | Description   | Emission Control Equipment             |
|--------------------------|---|--|
| 3-40 System<br>BC-6K     | 3-40-A-1 Reactor  | None                                   |
| 3-40 System<br>BC-5K     | 3-40-A-2 Receiver   | None                                   |
| 3-43 System<br>BC-5N     | 3-43-C-1 Eimco Filter   | None                                   |
| 3-57 System<br>BC-3M     | 3-57-A-1 thru 4<br>Tanks  | None                                   |
| 3-62 System<br>BC-4G     | 3-62-C-1 S Press  | None                                   |
| 3-66 System<br>BC-4F     | 3-66-A-1 Reactor<br>3-66-A-2 Receiver                             | None                                   |
| 3-68 System<br>BC-6H     | 3-68-A-1 Reactor  | None                                   |
| Building 4               |   |  |
| 4-1 System<br>BC-41      | 4-1-A-1 Reactor   | None                                   |
| 4-1 System<br>BC-42      | 4-1-A-2 Receiver  | None                                   |
| 4-2 System<br>BC-52      | 4-2-A-1 Reactor   | Scrubber (NH <sub>3</sub> )<br>4-2-C-5 |
| 4-32 System<br>BC-53     | 4-32-A-1 Reactor  | None                                   |
| Building 20 <sup>a</sup> |   |  |
| 20-01 System<br>BC-01    | Electrochemical Cells<br>20-1-A-1 thru 6,<br>20-1-A-21, 20-1-A-22 | Scrubbers*                             |
| 20-02 System<br>BC-02    | Electrochemical Cells<br>20-2-A-1 thru 12                         | Scrubber*                              |
| 20-03 System<br>BC-03    | Electrochemical Cells<br>20-3-A-1 thru 12                         | Scrubbers*                             |
| 20-04 System<br>BC-04    | Electrochemical Cells<br>20-4-A-1 thru 3                          | Scrubbers*                             |
| 20-11 System<br>BC-11    | 20-11-A-7 Column and<br>Reboiler                                  | Scrubber*                              |
| 20-12 System<br>BC-12    | 20-12-A-1 Distillation<br>Column                                  | Scrubber*                              |
| 20-21 System<br>BC-21    | 20-21-A-4 Silica Gel<br>Column                                    | None                                   |
| 20-22 System<br>BC-22    | 20-22-D-1 Discotherm  | Scrubber*                              |
| 20-33 System<br>BC-33    | 20-33-A-1, 2, 13<br>Distillation Columns                          | Scrubber*                              |
| 20-34 System<br>BC-34    | Dessicant Dryer Columns<br>20-34-A-1, 20-34-A2                    | None                                   |
| 20-41 System<br>BC-41    | 20-41-A-1 Reactor   | Scrubber*                              |
| 20-50 System<br>BC-51    | 20-50-A-1 Reactor   | Scrubber*                              |

| Emission Unit            | Description   | Emission Control Equipment  |
|--------------------------|---|---|
| 20-60 System<br>BC-61    | 20-60-A-1 Reactor   | Scrubber*   |
| 20-66 System<br>BC-66    | 20-66-B-11,<br>21,41,51 Distillation Columns                    | None  |
| 20-70 System<br>BC-70    | 20-70-A-1 Reactor   | Scrubber*   |
| 20-71 System<br>BC-71    | 20-71-A-1 Reactor   | Scrubber*   |
| 20-72 System<br>BC-72    | Columns 20-72-A-1,<br>20-72-A-11, 20-72-B-11                    | None  |
| 20-73 System<br>BC-73    | Tanks 20-73-A-1, 20-73-A-2,<br>20-73-A-6, 20-73-A-7             | Scrubber*<br>Dust Collector<br>20-73-C-2 Listed as<br>Insignificant in 3.1  |
| 20-90 System<br>BC-90    | 20-90-A-1 & 11 Distillation<br>Columns                          | None  |
| 20-93 System             | 20-93-A-1 thru 6 Finishing<br>Columns                           | None  |
| 20-95 System<br>BC-95    | 20-95-A-1 Wash Column   | None  |
| Building 20<br>Scrubbers | Building 20 equipment can<br>be served by various<br>scrubbers. | 20-31-C-2, 20-31-C-5<br>20-2-C-5, 20-3-C-3,<br>20-3-C-10, 20-31-C-3<br>20-33-C-7, 20-41-C-1<br>20-50-D-9, 20-60-D-5<br>20-70-C-1, 20-71-C-1<br>20-73-C-1, 20-31-C-1 |
| Building 23              |   |   |
| 23-01 System<br>BC-31    | 23-1-A-1 Reactor  | None  |
| 23-02 System<br>BC-91    | 23-2-B-3 Wiped Film<br>Evaporator                               | None  |
| 23-03 System<br>BC-33    | 23-3-A-1 Reactor  | None  |
| 23-03 System<br>BC-23    | 23-3-A-2 Receiver   | None  |
| 23-04 System<br>BC-09    | 23-4-C-1 Wiped Film<br>Evaporator                               | None  |
| 23-05 System<br>BC-15    | 23-5-A-1 Reactor  | None  |
| 23-05 System<br>BC-15    | 23-5-E-3 LUWA Evaporator  | None  |
| 23-06 System<br>BC-6A    | 23-6-A-1 Reactor  | None  |
| 23-07 System<br>BC-16    | 23-7-A-1 Reactor  | None  |
| 23-16 System<br>BC-6B    | 23-16-A-1 Packed Columns  | None  |
| 23-17 System<br>BC-34    | 23-17-A-1 Reactor   | None  |

| Emission Unit            | Description   | Emission Control Equipment   |
|--------------------------|---|--|
| 23-31 System<br>BC-38    | 23-31-A-1 Reactor   | None   |
| 23-32 and 34<br>Systems  | Weigh and Hold Tanks<br>23-32-A-3, 4, 5<br>23-34-A-3 and 4        | None   |
| 23-35 System<br>BC-39    | 23-35-A-1 Reactor   | None   |
| 23-37 System<br>BC-36    | 23-37-A-1 Encapsulator  | None   |
| 23-38 System<br>BC-08    | 23-38-A-1 Wiped Film<br>Evaporator                                | None   |
| Building 30 <sup>a</sup> |   |  |
| 30-01 System<br>BC-05    | 30-1-A-1 (-12) Twelve Cell<br>System                              | Scrubbers*   |
| 30-02 System<br>BC-06    | 30-2-A-1 (-12) Twelve Cell<br>System                              | Scrubbers*   |
| 30-06 System<br>BC-80    | 30-6-A-1 & 11, 13-19<br>Distillation Column and<br>Silica Columns | None   |
| 30-07 System<br>BC-40    | 30-7-A-1 and 2, 11 and 12<br>Columns                              | Scrubber*  |
| 30-08 System<br>BC-81    | 30-8-A-1 Reactor  | Scrubbers*   |
| 30-09 System             | 30-9-A-1, 2 and 3 Tanks   | Scrubber*<br><br>Dust Collector<br>30-9-C-2<br>Listed as<br>Insignificant in 3.1 |
| 30-20 System             | 30-20-A-1 Refrigeration<br>System                                 | None   |
| 30-14 System             | 30-14-A-1, A-10 and A-11<br>Columns                               | None   |
| 30-37 System             | Weigh Tank 30-37-A-1  | Scrubber*  |
| 30-61 System<br>BC-23    | 30-61-A-3 Discotherm<br>Evaporator                                | Scrubber*  |
| 30-67 System<br>BC-45    | 30-67-A-1 and 11<br>Distillation Columns                          | Scrubber*  |
| Building 30<br>Scrubbers | Building 30 equipment can<br>be served by various<br>scrubbers.   | 30-1-C-4, 30-1-C-12<br>30-2-C-4, 30-2-C-12<br>30-09-C-4, 30-08-C-1<br>30-61-C-1  |
| Building 68              |   |  |
| Building 68<br>System    | 68-1-C-1 Repackaging Unit<br>with Dust Collector                  | Dust Collector<br>68-1-C-1   |
| Other                    |   |  |
| BIS A                    | Bisphenol A Storage and<br>Transfer/Silo                          | Dust Collector<br>1-1-C-7, 3-98-C-10<br>3-98-C-11, 3-98-C-6<br>3-98-C-9          |

- a All vents for chemical manufacturing process units requiring control by scrubbers in Buildings 20 and 30 can alternatively discharge to a voluntary thermal oxidizer. This thermal oxidizer system is now included in this permit. The system includes two columns.
- \* Equipment and scrubber pairings are flexible. Scrubbers listed are process exhaust scrubbers. Room and spot scrubbers operated for industrial hygiene and safety reasons are not considered regulated emission control equipment.

The ancillary pieces of equipment are not named but are covered by this permit. Ancillary pieces of equipment are listed in the permit application. The Permittee is not required to notify the Illinois EPA of additional ancillary pieces of equipment present at the source until the renewal application for this permit is submitted.

#### 7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected chemical manufacturing process units" for the purpose of these unit-specific conditions, are the emission units used to manufacture specialty chemicals, including those units listed in Condition 7.1.2.
- b. The affected chemical manufacturing process units are subject to 35 IAC 212, Subpart L: Particulate Matter from Process Emission Sources, which provides that:
  - i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)]; and
  - ii. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322

(See also Attachment 1) [35 IAC 212.322(a)];  
and

- c. The affected chemical manufacturing process units are subject to 35 IAC 215.301, which provides that:

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall apply only to photochemically reactive material as defined in 35 IAC 211.4690 [35 IAC 215.301]. The provision of 215.302 allows emissions of organic material to exceed 8 lb/hr if they are controlled by a vapor recovery system (i.e. a control condenser), which removes 85% of the uncontrolled organic material that would otherwise be emitted to the atmosphere. The rule provides for possible use of afterburners or scrubbers, and therefore Permittee's voluntary thermal oxidizer may be used to meet the requirements of this rule.

- d. Various equipment to be described may produce materials that are subject to certain NESHAP requirements.

- i. 40 CFR 63 Subpart GGG, Pharmaceuticals Production

Reactor systems, when primarily used to produce a pharmaceutical or precursor of a pharmaceutical product, are subject to 40 CFR 63.1250 to 63.1261. At the time of permit issuance, the 2317 and 301 systems triggered this subpart. The Permittee shall comply with the process vent standard of 40 CFR 63.1254 by complying with the process-based annual mass limit of Section 63.1254(a)(2)(i) and (ii), that is actual HAP emissions from the sum of all process vents within a process not exceeding 1982.4 pounds in any 365-day period and the sum of all process vents for all combined process shall not exceed 3965 lb in any 365 day period.

Heat exchange system(s) shall meet the requirements of 40 CFR 63.1252(c), which includes meeting the current good management practice of 21 CFR 211.

For equipment leaks, the reactor system(s), when making a pharmaceutical or precursor of a

pharmaceutical product, shall follow the provisions in 40 CFR 63.1255.

For wastewater only the maintenance wastewater provisions cited in 40 CFR 63.1256(a) (1) and then listed in 40 CFR 63.1256(a) (4) are applicable. They apply to maintenance wastewater containing partially soluble or soluble HAPs listed in Tables 2 and 3 of Subpart GGG.

A. The owner or operator shall prepare a description of maintenance procedures for management of wastewater generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall:

1. Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities; and
2. Specify the procedures that will be followed to properly manage the wastewater and minimize organic HAP emissions to the atmosphere; and
3. Specify the procedures to be followed when clearing materials from process equipment.

B. The owner or operator shall modify and update the information required by Condition 7.1.3(d) (i) (A) of this section as needed following each maintenance procedure based on the actions taken and the wastewater generated in the preceding maintenance procedure.

C. The owner or operator shall implement the procedures described in Condition 7.1.3(d) (i) (A) and (B) as part of the startup, shutdown, and malfunction plan required under § 63.6(e) (3), if applicable.

ii. 40 CFR 63 Subpart OOO, Amino/Phenolic Resins

Reactor systems, when primarily used to produce an amino or phenolic resin, are subject to 40 CFR 63.1400 to 63.1419. At the time of permit issuance, the 307 reactor system triggered this subpart. The specific reactor batch process vent requirement that the Permittee complies with is Section 63.1406(a)(2)(iii), that is, reduce organic HAP emissions from the collection of all reactor batch process vents within the affected source, as a whole, to 0.0567 kilogram of organic HAP per megagram of product (0.0567 lb organic HAP/1000 lb product) or less for solvent-based resin production, or to 0.0057 kilogram of organic HAP per megagram of product (0.0057 lb/1000 lb product) or less for non-solvent-based resin production.

Heat exchange system(s) shall meet the requirements of 40 CFR 63.1409.

For equipment leaks, the reactor system(s), when making an amino or phenolic resin, shall follow the provisions in 40 CFR 63.1036 (Subpart UU) which allows use of an alternate compliance method involving pressure testing of batch equipment.

iii. 40 CFR 63 Subpart MMM, Pesticide Active Ingredient Production. This rule has a compliance date of December 23, 2003.

Reactor systems, when used to product a pesticide active ingredient, are subject to 40 CFR 63.1360 to 63.1369. At the time of permit issuance, the 310, 311, 313, and 343 reactor systems configured together trigger this subpart. The Permittee has chosen to comply by maintaining uncontrolled organic HAP emissions under 0.15 megagram/yr (330 lb/yr) from the sum of all process vents within a process. [40 CFR 63.1362(b)(2)(i)]

For equipment leaks, the reactor system(s), when making a pesticide active ingredient, shall follow the provisions in 40 CFR 63.1363 which allows use of an alternate compliance method involving pressure testing of batch equipment.

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

- a. This permit is issued based on the affected chemical manufacturing process units not being subject to the New Source Performance Standards (NSPS) for the Synthetic Organic Chemical Manufacturing Industry, 40 CFR Part 60, Subparts VV, NNN and RRR (equipment leaks, distillation operations and reactors), because the affected chemical manufacturing process units do not produce any of the affected chemicals listed in these regulations.
- b. This permit is issued based on the affected chemical manufacturing process units not being subject to the New Source Performance Standards (NSPS) for the Polymer Manufacturing Industry, 40 CFR Part 60, Subpart DDD, because the affected chemical manufacturing process units do not produce any of the affected polymers listed in this regulation.
- c. This permit is issued based on the affected chemical manufacturing process units not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for the Synthetic Organic Chemical Manufacturing Industry, 40 CFR Part 63, Subparts F through H, other than when portions of these subparts are referenced by applicable requirements in other subparts, because the affected chemical manufacturing process units do not produce any of the affected chemicals listed in these regulations.
- d. This permit is issued based on the affected chemical manufacturing processes not being subject to 35 IAC 215 Subpart Q, Leaks from SOCOMI equipment, because the chemical processes do not manufacture any of the chemical listed in Appendix D of Part 215.

#### 7.1.5 Control Requirements

- a. The Permittee shall follow good operating practices for the dust collectors and scrubbers listed in Condition 7.1.2 under "emission control equipment," including periodic inspection, routine maintenance and prompt repair of defects.
- b. Operating Conditions for 20-01 and 20-03 Cell Systems
  - i. Emissions of VOM<sup>a</sup> from each electrochemical cell shall be controlled by a condenser or series of condensers, operating to achieve a final gas outlet temperature of - 40°F.

- <sup>a</sup> The majority of the emissions for which this BACT condition was originally imposed in 1987 for the 20-03 system, have since been federally exempted as VOCs in 40 CFR 51.100, but continue to be regulated as NONVOM in the State of Illinois. The condenser(s) are not classified as control equipment since they recover product.
- ii. Emissions of fluorides<sup>b</sup> from electrochemical cells shall be controlled by a combination of:
- A. A condenser(s), operating to achieve a gas outlet temperature of - 40°F, followed by
- B. A scrubber(s), operating to achieve at least 97% control for fluoride.
- Alternatively, these emissions can be discharged to a voluntary thermal oxidizer. See Condition 7.1.5(d) below for proper operating requirements for the thermal oxidizer system.
- <sup>b</sup> The condensers are designed to remove product, while the scrubber primarily removes fluoride, e.g., HF.
- c. Operating Conditions for 30-01 and 30-02 Cell Systems
- i. Emissions of fluorides from electrochemical cells shall be controlled by a scrubber system. Alternatively, these emissions can be controlled by a voluntary thermal oxidizer, that comply with the same 97% control requirement that the scrubber must meet.
- ii. The scrubber system shall be operated to achieve at least 90% control for hydrogen fluoride, on an hourly-average, based on emission testing in accordance with Condition 7.1.7 and proper equipment operation as determined from the monitoring and recordkeeping required by Conditions 7.1.8 and 7.1.9.
- iii. The Permittee shall upgrade at least one existing water scrubber system to a caustic scrubber system to achieve a 98% removal efficiency of HF, with installation of the caustic scrubber by January 30, 2005. Demonstration of the HF removal efficiency by

an emissions test shall be completed with 90 days after the first C3 acid fluoride production run after issuance of this permit. After installation of the scrubber, cell system emissions of fluorides from the production of C3 acid fluoride shall be controlled by the caustic scrubber system. Alternatively, these emissions can be controlled by a voluntary thermal oxidizer.

Condition 7.1.5(c) (i) to (iii) represents the application of Best Available Control Technology (BACT) for fluorides as required by Section 165 of the Clean Air Act for all cell production except the production of C3 acid fluorides. Condition 7.1.5(c) (iii) represents the application of BACT for cell production of C3 acid fluorides.

d. Operating Requirements for Thermal Oxidizer

- i. Natural gas shall be the only added fossil fuel used in the thermal oxidizer.
- ii. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate thermal oxidizer system and vent gas scrubber in a manner consistent with good air pollution control practice for minimizing emissions. At minimum these practices include the following:
  - A. The thermal oxidizer combustion chamber shall be preheated to at least the recommended temperature prior to venting of emissions to the unit that is consistent with the temperature at which compliance was demonstrated in the most recent compliance test.
  - B. The thermal oxidizer combustion chamber temperature shall be maintained at temperature at which the compliance was demonstrated during the venting of the emissions to the unit. This was determined to be 1900°F (one-hour average).
  - C. The neutralization column shall be operational at all times when the thermal oxidizer system is in operation.

- D. The vent gas scrubber shall be maintained in operational condition and be used to control emissions when they are not controlled by thermal oxidizer.
- E. Written procedures for the operation maintenance, and monitoring device of the thermal oxidizer system and vent gas scrubber.
- F. Inventory of appropriate spare part, which would allow the minimizing the malfunction of the thermal oxidizer system.

7.1.6 Emission Limitations

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

- a. Emissions of VOM from various chemical processing equipment shall not exceed the following limits:

| <u>System or Equipment Name</u>  | <u>VOM Emissions</u> |                 | <u>State Permit Number</u> |
|--|----------------------|-----------------|----------------------------|
|  | <u>(Ton/Mo)</u>      | <u>(Ton/Yr)</u> |                            |
| System 4-2, When Making Silicon Urea LAB   | 0.6                  | 5.6             | 74020082                   |
| System 3-11, When Making Silicon Urea LAB  | 0.6                  | 5.6             | 75120011                   |
| System 3-40, When Making Silicon Urea LAB  | 0.6                  | 5.6             | 75120011                   |
| System 3-14, When Making Phthalazine   | 0.2                  | 1.5             | 74020082                   |
| 3-32 Flaker System (Existing and New Line Combined)  | 2.8                  | 10.0            | 81090032                   |
| System 3-27 Dryer and Disperser  | 3.5                  | 31.0            | 83060002                   |
| System 3-62  | 0.2                  | 1.0             | 88010040                   |
| 4-01 Reactor System Emission Limitations During Production of OCAMP DTO Were Discontinued Jan 18, 1991 in a Letter From IEPA to 3M |                      |                 |                            |

| <u>System or Equipment Name</u>  | <u>VOM Emissions</u> |                 | <u>State</u>  |
|--|----------------------|-----------------|---------------|
|  | <u>(Ton/Mo)</u>      | <u>(Ton/Yr)</u> | <u>Permit</u> |
|  |                      |                 | <u>Number</u> |
| 3-14 Reactor System<br>Emission Limitations During<br>Production of OCAMP DTO Were<br>Discontinued Jan 18, 1991 in<br>a LETTER FROM IEPA to 3M                     |                      |                 |               |
| 20-01 Cell System  | 8 lb/hr*             | 47              | 88050033      |
| 20-02 Cell System  | 8 lb/hr*             | 39              | 80120023      |
| 20-03 Cell System  | 8 lb/hr*             | 39              | 87070077      |
| 20-04 Cell System  | 8 lb/hr*             | 32.5            | 90020017      |
| Downstream System (Including<br>20-11, 20-12, 20-21, 20-22,<br>20-31, 20-33, 20-34, 20-41,<br>20-50, and 20-60, 20-90,<br>20-93, 20-95 Systems)                    | 8 lb/hr*             | 47              | 81070016      |
| 20-66 Downstream System  | 8 lb/hr*             | 35              | 97090093      |
| 20-70 Downstream System<br>(Including 20-70, 20-71,<br>20-72, and 20-73)   | 8 lb/hr*             | 35              | 95110110      |
| TD4 Process  | 3.0                  | 26.7            | 96090056      |
| Building 23 Systems<br>(including 23-01, 23-02,<br>23-03, 23-04, 23-05, 23-06,<br>23-07, 23-16, 23-17, 23-31,<br>23-35, 23-37, and 23-38 as<br>Described in 7.1.2) |                      | 135.4           | 85020011      |
|  |                      | Building        | 85020063      |
|  |                      | Cap             | 85090015      |
|  |                      | No              | 89030075      |
|  |                      | Individual      | 90100049      |
|  |                      | Unit            | 94020091      |
|  |                      | Greater         | 94110038      |
|  |                      | Than 35         | 96010105      |
|  |                      |                 | 96020020      |
| Building 30 Systems<br>(Including 30-01, 30-02,<br>30-06, 30-07, 30-08, 30-09,<br>30-14, 30-37, 30-61, and<br>30-67 Systems)                                       | 8 lb/hr*             | 35              | 96040074      |

\* Hourly VOM rates are only applicable to VOM that meets the definition of photochemically reactive in 35 IAC 211.4690 and not controlled by 85%. See Condition 7.1.3(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 contain revisions to previously issued permits listed above. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned 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 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 permit and the information in the CAAPP application contains the most current and accurate information for the source at the time of permit issuance. Specifically, the hourly rates in the state permit have been replaced by monthly rates in some cases. The annual rate has not been changed except for possible rounding to the nearest tenth of a ton. [T1R]

- b. Emissions of pollutants other than VOM from various chemical processing equipment shall not exceed the following:

| System or Equipment<br>Name             | Pollutant | Emissions |        | State<br>Permit<br>Number |
|---|-----------|-----------|--------|---------------------------|
|   |           | (T/Mo)    | (T/Yr) |                           |
| Building 68 Resin<br>Packaging System   | PM        |           | 0.5    | 00030058                  |
| System 3-14, When<br>Making Phthalazine | PM        | 0.2       | 1.8    | 74020082                  |
| System 3-14, When<br>Making Phthalazine | Acetone   | 0.6       | 5.8    | 74020082                  |
| 3-32 Flaker System                      | PM        | 0.5       | 4.34   | 81090032                  |

| <u>System or Equipment<br/>Name</u>   | <u>Pollutant</u> | <u>Emissions<br/>(T/Mo)</u> | <u>Emissions<br/>(T/Yr)</u> | <u>State<br/>Permit<br/>Number</u> |
|---|------------------|-----------------------------|-----------------------------|------------------------------------|
| Emission<br>Limitations During<br>Production of OCAMP<br>DTO Were<br>Discontinued<br>January 18, 1991 in<br>a LETTER FROM IEPA<br>to 3M                     |                  |                             |                             |                                    |
| 20-01 Cell System   | HF               | 0.68<br>lb/hr               | 3.0                         |                                    |
| 20-01 Cell System   | CO               | 5<br>lb/hr                  | 22                          | 80120023                           |
| 20-01 Cell System   | NONVOM           | --                          | 1000                        | 88050033                           |
| 20-02 Cell System   | HF               | 0.68<br>lb/hr               | 3.0                         | 80120023                           |
| 20-02 Cell System   | CO               | 5<br>lb/hr                  | 22                          |                                    |
| 20-03 Cell System   | NONVOM           | --                          | 1000                        | 87070077                           |
| 20-03 Cell System   | HF               | 0.68<br>lb/hr               | 3.0                         | 87070077                           |
| 20-03 Cell System   | CO               | 5                           | 22                          | 87070077                           |
| Downstream System<br>(Including 20-11,<br>20-12, 20-21,<br>20-22, 20-31,<br>20-33, 20-34,<br>20-41, 20-50, and<br>20-60, 20-90,<br>20-93, 20-95<br>Systems) | Fluoride         | N/A                         | 0.44                        | 81070016                           |
|   | NONVOM           | ---                         | 1000                        | 81070016                           |
| 20-66 Downstream<br>System<br>(Distillation<br>Process)   | NONVOM           | ---                         | 1000                        | 97090093                           |
|   | Fluorides        |                             | 0.44                        |                                    |

| System or Equipment<br>Name   | Pollutant | Emissions     |        | State<br>Permit<br>Number |
|---|-----------|---------------|--------|---------------------------|
|   |           | (T/Mo)        | (T/Yr) |                           |
| Building 23 Units<br>(Including 23-01,<br>23-02, 23-03,<br>23-04, 23-05,<br>23-06, 23-07,<br>23-16, 23-17,<br>23-31, 23-35,<br>23-37, and 23-38 as<br>described in 7.1.2) | Fluorides |               | 2.9    | 85020011                  |
|   |           |               |        | 85020063                  |
|   |           |               |        | 85090015                  |
|   |           |               |        | 89030075                  |
|   |           |               |        | 90100049                  |
|   |           |               |        | 94020091                  |
|   |           |               |        | 94110038                  |
|   |           |               |        | 96010105                  |
|   |           | 96020020      |        |                           |
| 4-2 Reactor System  | Ammonia   |               | 0.5    | 74040110                  |
| Buildings 3 and 23<br>Cleaning Systems  | Non-VOM   | 0.2           | 1.25   | 96020019                  |
| 3-34 Dryer Charge<br>Tank   | PM        | 0.05          | 0.27   | 74020083                  |
| Building 23 Systems<br>(Including 23-01,<br>23-03, 23-03,<br>23-04, 23-05,<br>23-06, 23-07,<br>23-16, 23-17,<br>23-31, 23-35,<br>23-37, 23-38)                            | PM        |               | 0.15   | 85020011                  |
|   |           |               |        | 85020063                  |
|   |           |               |        | 85090015                  |
|   |           |               |        | 89030075                  |
|   |           |               |        | 90100049                  |
|   |           |               |        | 94020091                  |
|   |           |               |        | 94110038                  |
|   |           |               |        | 96010105                  |
|   |           | 96020020      |        |                           |
| Building 30 Systems<br>(Including 30-01,<br>30-02, 30-06,<br>30-07, 30-08,<br>30-09, 30-14,<br>30-37, 30-61, and<br>30-67 Systems)  | Fluoride  | 12.4<br>lb/hr | 35     | 96040074                  |
|   | CO        | 17.0<br>lb/hr | 74     |                           |
|   | HF        | 0.68<br>lb/hr | 2.7    |                           |
|   | NONVOM    | ---           | 774    |                           |

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 contain revisions to previously issued permits listed above. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned 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 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 permit and the information in the CAAPP application contains the most current and accurate information for the source at the time of permit issuance. Specifically, the hourly rates in the state permit have been replaced by monthly rates. The annual rate has not been changed except for possible rounding to the nearest tenth of a ton.

- c. Emissions from the thermal oxidizer system shall not exceed the following limits:

|                                | <u>Lbs/Hour</u> | <u>Tons/Year</u> |
|--------------------------------|-----------------|------------------|
| NO <sub>x</sub>                | 7.31            | 32.0             |
| SO <sub>2</sub>                | 2.28            | 10.0             |
| CO                             | 2.28            | 10.0             |
| Fluorides (HF)*                | 0.65            | 2.85             |
| H <sub>2</sub> SO <sub>4</sub> | 1.28            | 5.60             |

These limits are based on the information provided in Construction Permit 02010008. Compliance with the hourly limit shall be determined as a three-hour average. Compliance with annual limits shall be determined from a running total of 12 months of data [T1].

\* The HF limits in this permit may be raised by the Illinois EPA to account for contemporaneous decreases in HF emissions from the operations and processes that are controlled by this system, If 3M requests a revised permit that relies on such decreases.

#### 7.1.7 Testing Requirements

The Permittee shall complete the following testing requirements for the affected chemical manufacturing process units to demonstrate compliance with Conditions 5.5.3, 6.2, and 7.1.6, pursuant to Section 39.5(7)(c) of the Act:

- a. Upon request by the Illinois EPA or USEPA where it is necessary to demonstrate compliance, the Permittee shall, at his own expense, conduct tests in accordance

with the applicable test methods and procedures specified in 35 IAC 215.102, or in accordance with Method 320 (Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy). These tests shall be designed to quantify VOM or other emissions from the affected chemical manufacturing process units and associated activities under process conditions representative of maximum emissions.

- b. A test to demonstrate compliance with 35 IAC 215 Subpart K may involve any of the following:
  - i. Emission rate (lb/hr);
  - ii. Control device efficiency (%); or
  - iii. The chemical composition of the emissions to demonstrate if the material is photochemically reactive.

#### 7.1.8 Monitoring Requirements

- a. The condenser(s) on the 20-02 and 20-03 cell systems shall be equipped with a device for measuring the final outlet gas temperature.
- b. The scrubbers on the 20-01, 20-03, 30-01 and 30-02 cell systems shall be equipped with monitoring devices for the following:
  - i. Flow of process gas to the scrubber (on/off).
  - ii. Scrubbant flow rates or other appropriate parameters, e.g., pump motor amps or pressure in the water supply line to indicate the flow of scrubbant in the scrubber.
- c. Monitoring for Thermal Oxidizer System
  - i. The thermal oxidizer system shall be equipped with the following continuous monitoring devices which shall be installed, calibrated, and maintained according to vendor's specifications and operated at all times that the thermal oxidizer is in use:
    - A. Thermal oxidizer combustion chamber temperature;
    - B. The absorption column and neutralization column for scrubbant flow rate;

- C. Alkalinity (pH) of the recycled caustic stream in the neutralization column, either measured directly or through a surrogate parameter such as conductivity. This monitor shall be linked to feedback device to maintain the pH level of the recycled caustic within the target range.
- ii. A. The vent gas scrubber shall be equipped with monitoring devices for the following:
  - 1. Flow of process gas to the scrubber, i.e., need to operate the scrubber; and
  - 2. Scrubbant flow rates or other appropriate parameters, e.g., pump motor amps or pressure in the water supply line to indicate the flow of scrubbant in the scrubber. These devices shall be operated at all times that the vent gas scrubber is in use and maintained in accordance with good air pollution control practice.
- B. The scrubbant in the lower stage of the Vent Gas Scrubber, to which caustic is added, shall be sampled and analyzed for its pH on a regular basis during operation of the scrubber. At a minimum, this shall occur each time the Vent Gas Scrubber is operated with sampling to be completed no later than two hours after start of operation, and at least once per shift thereafter.

#### 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected chemical manufacturing process units to demonstrate compliance with Conditions 5.5.1, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of operation and emissions of each affected chemical manufacturing process unit, including the following:
  - i. The amount of each material produced in each vessel (pound/month);

- ii. VOM emissions with supporting calculations, e.g., the procedures in Condition 7.1.12 (ton/month and ton/year);
  - iii. Process design information for "consumption" of the organic raw material by the system, as the Permittee assumes that only a fraction of the organic raw material is emitted to the atmosphere as VOM; and
  - iv. The maximum hourly emission rates of VOM, NONVOM and Hydrogen Fluoride (HF) for each product or categories of products, based on design calculations for each cell system with supporting information.
- b. HAP emissions from each process unit (lb/year)
- c. Records addressing use of good operating practices for the dust collectors, and scrubbers identified as control in Condition 7.1.2.
- i. Records for periodic inspection of the dust collectors and scrubbers identified as control equipment in Condition 7.1.2, including the date and the nature of the inspection;
  - ii. Records for prompt repair of defects, with identification and description of the defect, the effect on emissions, date identified and date of repair, and the nature of the repair; and
  - iii. Records of manufacturer's specifications for the scrubbers.
- d. Records for Thermal Oxidizer System with Columns
- i. Permittee shall maintain file of the following items:
    - A. Manufacturers specification for
      - 1. Vent gas scrubber and thermal oxidizer system;
      - 2. Continuous monitoring device
    - B. A current schematic diagram identifying process units vented to the control system;

- C. A copy of Final Report(s) for emission testing conducted pursuant to Condition 1.1.7.
- ii. The Permittee shall maintain following monthly operating records:
  - A. The quantity and type of each fuel consumed for the thermal oxidizer system;
  - B. Production of the HF solution;
  - C. Consumption of caustic in the neutralization column.
- iii. The Permittee shall maintain the following hourly or daily operating records:
  - A. Amount of process gas vented to the thermal oxidizer system on hourly basis (cfm); or
  - B. Amount of process gas vented to the thermal oxidizer system on a daily basis (lbs/hrs); or
  - C. Product runs vented to the thermal oxidizer system on a daily basis (lbs/hrs) and amount of process gas vented to the thermal oxidizer, based on process design calculation or mass flowrate measurement, on a monthly basis (cfm).
- iv. The Permittee shall keep inspection, maintenance, and repair logs with date and nature of such activities for the vent gas scrubber and thermal oxidizer system.
- v. The Permittee shall maintain the following records related to emissions from the vent gas scrubber and thermal oxidizer system:
  - A. Other data, not addressed above, used or relied upon by the Permittee to determine emissions;
  - B. Monthly and annual emissions of NO<sub>x</sub>, CO, SO<sub>2</sub>, VOM, and HF from vent gas scrubber and thermal oxidizer system with supporting calculation.
- vi. The Permittee shall maintain records that identify any day in which emissions or

operation exceed an applicable standard or limitation.

- e. Records of any new ancillary pieces of equipment used with the affected chemical manufacturing process units listed in Condition 7.1.2.
- f. Records of any emission tests performed.
- g. The Permittee shall keep records required by the three NESHAP rules cited in Condition 7.1.3(d), as follows:
  - i. Applicable portions of 40 CFR 63.1259 for the reactor systems subject to Subpart GGG, Pharmaceutical Production and of § 63.1256(a) (4) (iv).
  - ii. Applicable portions of 40 CFR 63.1367 for the reactor systems subject to Subpart MMM, Pesticide Active Ingredient Production, as of the effective date of the rule, December 23, 2003.
  - iii. Applicable portions of 40 CFR 63.1416 for reactor systems subject to Subpart OOO, Manufacture of Amino/Phenolic Resins.
- h. Records for voluntary Leak Detection and Repair program equivalent to Subpart UU, 40 CFR Part 63.1038. When implemented, this program will enable the Permittee to use lower emission factors for the determination of major status for HAPs and thus the applicability of two NESHAPs as previously discussed. If the Permittee is unable to maintain its status as a minor source of HAPs, the equipment leaks program may be discontinued unless implementation of another leaks program (e.g. required by Subpart FFFF) is required to comply with any new applicable NESHAP.

#### 7.1.10 Reporting Requirements

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

- a. Emissions of VOM in excess of the limits in Conditions 7.1.3(c) and/or 7.1.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

- b. The Permittee shall comply with the reporting requirements of the three NESHAP rules cited in Condition 7.1.3(d), as follows:
  - i. Applicable portions of 40 CFR 63.1260 for the reactor systems subject to Subpart GGG.
  - ii. Applicable portions of 40 CFR 63.1368 for the reactor systems subject to Subpart MMM.
  - iii. Applicable portions of 40 CFR 63.1417 for the reactor systems subject to Subpart 000.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Usage of any combination of batches or raw materials or intermediates, or any combination of listed basic production units with various pieces of ancillary equipment without exceeding the emission limits of this permit and without violating any other requirements of this permit.
- b. The Permittee may vent additional process units in Buildings 20 and 30 to the thermal oxidizer system for a period of 5 years from the initial startup of thermal oxidizer system.

#### 7.1.12 Compliance Procedures

- a. Compliance with the PM emission limitations in Condition 7.1.3(b) is assured and achieved by the proper operation, maintenance, and work-practices inherent in operation of the affected chemical manufacturing process units. PM emissions shall be determined by the recordkeeping requirements in Condition 7.1.9(a)(1) and 7.1.9(c) and an emission factor of 0.1% of all dry materials used.
- b. Compliance with the VOM and other NONVOM emission limitations shall be determined by the recordkeeping requirements in Condition 7.1.9 and the following procedure:

Emission Master™ is a software tool designed to assist in estimating emissions from batch operations. Each batch product is scrutinized and broken into individual processing steps. Information from individual process steps is entered into the software. The software calculations, along with other information, including in some cases process knowledge and laboratory samples, is used to create a mass balance, from which an estimated emission factor is derived. This can then be used with production records through the REAP database to estimate total VOM, NONVOM, CO and HAP for the previous month, and summed on a 12-month rolling average basis. For continuous processes, laboratory data, pilot plant data, plant data, process knowledge, and EPA Method 320 (FTIR) are used to develop mass balances, and emission factors are calculated from those mass balances.

- c. The Permittee proposes a voluntary leak detection and repair program equivalent to 40 CFR Part 63 Subpart UU Sections 63.1019 to 63.1039 for components in organic HAP service that are outside the buildings plus the main header(s) inside the building that branches to the individual reactor systems. The equipment types in the monitoring program consist of valves (63.1025), pumps (63.1026), connectors (63.1027), and agitators (63.1028). This voluntary program as outlined is not required if the source cannot maintain its status as a minor source of HAPs.

Within the first 90 days of the date the permit is issued the Permittee will do an initial identification (tag) of components and initial monitoring at 500 ppm using method 21. The Permittee will repair leaking components. For all tagged components we will calculate the percent leaking to determine monitoring frequency. Monitoring frequency will then be established based on this initial percent leaking according to Subpart UU (e.g. if less than 0.25 % monitor each valve every 2 years).

The Permittee will also do sensory monitoring of components in heavy liquid service (diglyme) as defined in 63.1029.

The Permittee will follow EPA 1995 Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017) Section 2.4.4 for screening if not all connectors or valves can be screened at the same time.

The Permittee will follow EPA 1995 Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017) Section 2.3.3 for reporting actual emissions using

Table 2-11 for SOCOMI zero-default values if no leaks are detected and use the correlation values if leaks are detected.

The Permittee will report the LDAR monitoring results every 6 months at the same time as the Title V semi-annual reports are due. The first report may or may not be exactly for a 6 month period. The first report will include the process unit, number of each type of equipment (valves), the method and frequency (weekly, monthly, ...) the planned schedule for monitoring which will be based on the initial startup per cent leaking. The reports will include the information in 63.1039(b) as applicable.

7.2 Storage Tanks

7.2.1 Description

The Permittee operates a number of storage tanks to store materials used or produced in the chemical manufacturing processes at this source. The tanks generally have low emissions but in many cases the material is a HAP and the criteria for classification as an insignificant unit is much lower for HAPs.

Most of the tanks are fixed roof aboveground tanks but there are some pressure tanks and some underground tanks. Two HAP containing tanks are vented to a flare.

7.2.2 List of Emission Equipment and Pollution Control Equipment<sup>a</sup>

| Equipment     | Description                        | Emission Control Equipment                         |
|---------------|------------------------------------|--|
| Storage Tanks | Chemical or Gasoline Storage Tanks | Two Tanks Vented to Flare, No Control on Remainder |

<sup>a</sup> Further details of the tanks are provided in Attachment 2.

7.2.3 Applicability Provisions

- a. An "affected storage tank," for the purpose of these unit-specific conditions, is a storage tank identified in Condition 7.2.2 and Attachment 2.
- b. Each affected storage tank is subject to 35 IAC 215.301, which specifies that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302 and the following exception: if no odor nuisance exists this limitation shall apply only to photochemically reactive material pursuant to the definition in 35 IAC 211.4690 [35 IAC 215.301].
- c. Each affected storage tank is subject to the requirements of 35 IAC 215.122(b) because each affected storage tank has a storage capacity greater than 946 liters (250 gallons). If no odor nuisance exists this regulation shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3 °K (70 °F).

7.2.4 Non-Applicable Regulations

- a. Each tank listed in Attachment 2 is not subject to 35 IAC 215.121, 215.123, or 215.124 because:

- i. The tank capacity is less than 40,000 gallons;
  - ii. The tank does not contain a volatile petroleum liquid or volatile organic liquid with a vapor pressure greater than 2.5 psia at 70°F;
  - iii. The tank is a pressure tank capable of withstanding the vapor pressure of such liquid, or the pressure of its gas, so as to prevent vapor or gas loss to the atmosphere at all times; or
  - iv. More than one of the above provisions apply.
- b. This permit is issued based on the affected tanks not being subject to the New Source Performance Standards (NSPS) for storage tanks, 40 CFR 60 Subpart K, Ka or Kb because:
- i. The tank was constructed prior to 1973.
  - ii. If constructed after June 11, 1973 but prior to July 23, 1984 and containing a petroleum liquid, the capacity is less than 40,000 gallons.
  - iii. If constructed after July 23, 1984 the vapor pressure of the stored volatile organic liquid is less than 4.0 psia.

#### 7.2.5 Operational And Production Limits And Work Practices

- a. Pursuant to 40 CFR 60, Subpart Kb the Permittee shall not store any organic material with a maximum true vapor pressure of 27.6 kPa (4.0 psia) or greater in each affected storage tank with storage capacity greater than or equal to 75 m<sup>3</sup> (19,813 gallons) that is constructed, reconstructed, or modified after July 23, 1984. Storage of such material in these affected storage tanks requires the use of additional emissions control.
- b. Each affected tank shall be equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108, or unless such tank is fitted with a recovery system as described in 35 IAC 218.121. If no odor nuisance exists the limitations of this condition shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3 °K (70 °F) [35 IAC 218.122(b) and (c)].

- c. Any tank with a capacity over 40,000 gallons, and not a pressure tank, shall not contain a volatile organic liquid with a vapor pressure over 2.5 psia.
- d. Operation of Flare Controlling HAP Emissions from Two Tanks

The Permittee has voluntarily chosen to use a flare to control HAP emissions from two tanks (Methanol tank 1-1-A-39-T and Toluene tank 1-1-A-9-T). If the Permittee continues to operate in this manner the flare shall be operated with a flame present at all times when emissions are being vented to the flare in a manner consistent with good air pollution practices such as operating in accordance with 40 CFR 63.11(b) or the emission factor for an uncontrolled tank used to make the calculation of HAP emissions during that time period. If the Permittee is unable to maintain its status as a minor source of HAPs, the flare may be shut down or the tanks not vented to the flare unless operation of the flare is required to comply with any new applicable NESHAP.

7.2.6 Emission Limitations

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

- a. Emissions from the affected storage tanks shall not exceed the following limits:

| <u>Emission Source</u> | <u>VOM Emissions<br/>(Ton/Year)</u> |
|------------------------|-------------------------------------|
| Tanks and Tank Loading | 14.5                                |

These limits are based on the maximum total throughput for each tank group, molecular weight and vapor pressures of materials stored, and standard emission factors for storage tanks.

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 contain revisions to previously issued Permit 72100431. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned 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 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 permit and the information in the CAAPP application contains the most current and accurate information for the source at the time of permit issuance. Specifically, the numerous emission limits on groups of tanks were combined into a single emission limit for all storage tanks. Together with Condition 7.1.6, the overall emission limits represent an increase in allowable VOM emissions of 6,892 pounds per year [T1R].

7.2.7 Testing Requirements

None

7.2.8 Inspection Requirements

None

7.2.8 Monitoring Requirements

If the flare is being operated to reduce HAP emission from the methanol and toluene storage tanks, the flare shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected storage tank to demonstrate compliance with Conditions 5.5.1, 7.2.3, and 7.2.7 pursuant to Section 39.5(7)(b) of the Act:

- a. The identification and properties of each organic liquid stored at the source, as related to emissions, i.e., vapor pressure and molecular weight;
- b. The vapor weight percent of each HAP in the organic material emissions for each liquid determined as the average over the annual range of storage temperature and representative data on the composition of the liquid, with identification of supporting documentation, e.g., USEPA 1992 survey; and

- c. The Permittee shall maintain records of the following items on a monthly basis for the previous month:
  - i. The throughput of each organic liquid through each tank or group of tanks;
  - ii. The VOM emissions attributable to each organic liquid stored at the source, tons/month, with supporting calculations, calculated utilizing an approved USEPA methodology, such as the current version of the TANKS program or the method outlined in AP-42, 5th Edition, Volume I, Supplement D, September 1997;
  - iii. For each HAP identified as present, the total emissions of the individual HAP for each affected storage tank at the source, in tons/month, with supporting calculations; and
  - iv. Total emissions of each individual HAP, and combined HAPs from the source, in tons/month, with supporting calculations.
  
- d. The Permittee shall maintain records of the following for the flare if it is being used to control emissions from the two HAP containing storage tanks:
  - i. A file that contains the following information:
    - A. The design specifications of the flare, including capacity (scf/minute and Btu/scf).
    - B. For each emission unit served by the flare, the range of exhaust flow rate from the unit (scf/minute) and range of heat content (Btu/scf), with supporting calculations.
  - ii. A log or other records as follows:
    - A. An operating log for the flare that at a minimum identifies periods when the flare is in use as verified by the presence of a flame and the emission units being controlled by the flare.
    - B. A maintenance and repair log for the flare.

#### 7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with the operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Any storage of organic liquid with a true vapor pressure greater than 27.6 kPa (4.0 psia) in an affected storage tank with storage capacity greater than or equal to 75 m<sup>3</sup> (19,813 gallons) that was constructed after July 23, 1984, within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.
- b. Any loading of organic liquid with a true vapor pressure greater than or equal to 17.24 kPa (2.5 psia) in an affected storage tank without usage of a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.
- c. VOM emissions exceeding the allowable of Condition 7.2.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

#### 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected storage tank 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 the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.2 of this permit.

#### 7.2.12 Compliance Procedures

- a. Compliance with the requirements in Condition 7.2.5 shall be determined by the recordkeeping and reporting requirements in Condition 7.2.9 and Condition 7.2.10.

- b. Emissions from each affected storage tank shall be determined through the use of the current version of the USEPA TANKS program or the method outlined in AP-42, 5th Edition, Volume I, Supplement D, September 1997. For tanks vented to the flare and time periods when the flare is operation an additional 95% reduction may be taken above the USEPA Tanks or AP-42 calculation.

7.3 Unit: Fuel Combustion Units  
Control: None

7.3.1 Description

Natural gas fired boilers with #6 fuel oil as standby fuels are used for production of process steam.

7.3.2 List of Emission Units and Pollution Control Equipment

| Equipment      | Design Heat Input Capacity | Emission Control Equipment |
|----------------|----------------------------|----------------------------|
| Boiler #1      | 50 mmBtu/hr                | None                       |
| Boiler #2      | 50 mmBtu/hr                | None                       |
| Boiler #3      | 75 mmBtu/hr                | None                       |
| Reactor Burner | 3.8 mmBtu/hr               | None                       |

7.3.3 Applicable Provisions and Regulations

- a. The "affected boiler" for the purpose of these unit-specific conditions, is each piece of equipment listed in condition 7.3.2.
- b. The emissions of particulate matter (PM) into the atmosphere in any one-hour period shall not exceed 0.15 kg/MW-hr (0.10 lb/mmBtu) of actual heat input from any fuel combustion emission unit using liquid fuel exclusively [35 IAC 212.206].
- c. The emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- d. The emission of sulfur dioxide (SO<sub>2</sub>) into the atmosphere in any one hour period from any affected boiler burning liquid fuel exclusively shall not exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (1.0 lb/mmBtu) [35 IAC 214.122(b)(1)].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected boiler is not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MW (250 mmBtu/hr).
- b. Pursuant to 35 IAC 215.303, the affected boiler, i.e., fuel combustion emission unit, is not subject to 35 IAC 218.301, Use of Organic Material.

- c. There are no applicable requirements for particulate matter or sulfur dioxide for the affected boiler while firing natural gas.
- d. The New Source Performance Standard for Small - Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, reconstructed, or modified after June 9, 1989. The affected boilers were all constructed prior to and not modified after June 9, 1989, therefore, these rules do not apply.

7.3.5 Operational and Production Limits and Work Practices

At the above location, the Permittee shall not utilize a residual fuel oil (Grades No. 4, 5 and 6) with a sulfur content greater than that given by the formula:

$$\text{Maximum wt. percent sulfur} = (0.00005) \times (\text{Gross heating value of the oil in Btu/lb})$$

This requirement assures compliance with Condition 7.3.3(d).

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected boiler #3 is subject to the following:

Emissions from the boiler #3 shall not exceed the following:

| <u>Pollutant</u> | <u>Emissions<br/>(Tons/Year)</u> |
|------------------|----------------------------------|
| PM               | 3.3                              |
| NO <sub>x</sub>  | 39.5                             |
| CO               | 17.0                             |
| SO <sub>2</sub>  | 36.6                             |
| VOM              | 1.4                              |

These limits are based on standard emission factors, and firing of as much as 375,000,000 SCF of natural gas as the primary fuel and 500,000 gallons of #6 oil as standby fuel (T1).

The above limitations were established in Construction Permit #85020063, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the

CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected boiler to demonstrate compliance with Conditions 5.5.1, 7.3.3, and 7.3.6, 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 boiler (gal/month and gal/year).
- c. The maximum 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 NO<sub>x</sub>, PM, SO<sub>2</sub>, CO and VOM emissions, based on natural gas consumption and residual oil consumption for each boiler and the applicable emission factors from Condition 7.1.12(d) with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with applicable control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Notification within 60 days of operation of an affected boiler that was not in compliance with the opacity limitations in Condition 5.5.2(b) based on a Method 9 test, with a copy of such record for each incident.
- b. If there is an exceedance of sulfur content of #6 oil in excess of the limit specified in Condition 7.3.3, the Permittee shall submit a report within 30 days after receipt of a noncompliant shipment of distillate fuel oil.

- c. Emissions of NO<sub>x</sub>, PM, SO<sub>2</sub>, or VOM from the affected boilers in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance with Conditions 7.3.3(b) and (c) are assumed to be achieved by the work practices inherent in operation of an affected boiler, thus no compliance procedures are set in this permit addressing this regulation.
- b. Compliance with Condition 7.3.3(d), shall be based on use of a fuel oil that meets the requirements of Condition 7.3.5, the recordkeeping requirements in Condition 7.3.9 and the emission factor in Condition 7.3.12(c) (ii).
- c. Compliance with the emission limits in Conditions 5.5.1 and 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:
  - i. Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

| <u>Pollutant</u> | <u>Emission Factor</u><br><u>(lb/10<sup>6</sup> ft<sup>3</sup>)</u> |
|------------------|---|
| PM               | 7.6   |
| SO <sub>2</sub>  | 0.6   |
| VOM              | 5.5   |
| NO <sub>x</sub>  | 100   |
| CO               | 84  |

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

Boiler Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- ii. Emissions from the affected boilers burning #6 oil shall be calculated based on the following emission factors:

| <u>Pollutant</u> | <u>Emission Factors<br/>(lb/10<sup>3</sup> gallon)</u> |
|------------------|--|
| PM               | 10   |
| NO <sub>x</sub>  | 55   |
| SO <sub>2</sub>  | 157S   |
| VOM              | 1.5  |
| CO               | 5  |

These are the emission factors for uncontrolled #6 oil combustion in commercial/institutional/residential combustors, Tables 1.3-1, 1.3-3 and 1.3-7, AP-42, Volume I, Fifth Edition, September 1998. "S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Boiler Emissions (ton) = #6 oil consumed (gallons) multiplied by the appropriate emission factor/2000.

Total emissions for each pollutant are to be determined by combining the results of Conditions 7.3.12(i) and (ii) for all affected boilers.

- d. For purposes of compliance with the opacity limitations of Condition 5.2.2, the Permittee shall conduct qualitative visible emissions observation once each day (during daylight hours) when the affected boiler is in operation and using a fuel other than natural gas, to observe for the presence of abnormal visible emissions. If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions. If the Method 9 test shows that the unit is not in compliance with Condition 5.5.2(b), this shall be reported as per Condition 7.3.10(a).

7.4 Unit: Loading Operations  
Control: None

7.4.1 Description

Loading of products into shipping containers is conducted in various locations throughout the plant. Material can be loaded directly from process units or from bulk storage. Several loading racks are located throughout the plant to fill trucks. Five loading racks are vented to a flare in order to achieve minor source HAP status.

7.4.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit      | Description   | Emission Control Equipment   |
|--------------------|---|--|
| Loading Operations | Various Units:<br>10 Loading Racks, 6 Fixed Roof Storage Tanks, Loading Directly From Process Vessels | Five Loading Racks vented to Flare, No Control or Remainder of Units |

7.4.3 Applicability Provisions and Applicable Regulations

- a. The "affected loading operations" for the purpose of these unit-specific conditions, are all product loading operations as described in Condition 7.4.2
- b. The affected loading operations are subject to 35 IAC 215 Subpart B, Organic Emissions from Storage and Loading Operations, which provides that:

The Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having throughput of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to 35 IAC 201, and further processed consistent with 35 IAC 215.108. If no odor nuisance exists, this limit shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater [35 IAC 215.122(a) and (c)].

- c. Each affected loading operation is subject to 35 IAC 215.301, which specifies that no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from

any emission unit, except as provided in 35 IAC 218.302 and the following exception: if no odor nuisance exists this limitation shall apply only to photochemically reactive material as defined in 35 IAC 211.4690 [35 IAC 215.301].

#### 7.4.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected loading operations not being subject to the New Source Performance Standards (NSPS) for the Synthetic Organic Chemical Manufacturing Industry, 40 CFR Part 60, Subparts VV (equipment leaks), because the affected loading operations are not associated with equipment that produces any of the affected chemicals listed in this regulation.
- b. This permit is issued based on the affected loading operations not being subject to the New Source Performance Standards (NSPS) for the Polymer Manufacturing Industry, 40 CFR Part 60, Subpart DDD, because the affected loading operations are not associated with equipment that produces any of the affected polymers listed in this regulation.
- c. This permit is issued based on the affected loading operations not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for the Synthetic Organic Chemical Manufacturing Industry, 40 CFR Part 63, Subparts F through H, other than when portions of these subparts are referenced by applicable requirements in other subparts, because the affected loading operations are not associated with equipment which produces any of the affected chemicals listed in these regulations.
- d. This permit is issued based on the affected loading operations not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Polymers and Resins, 40 CFR Part 63, Subparts U and JJJ, because the affected loading operations are not associated with equipment which produces any of the affected polymers listed in these regulations.
- e. This permit is issued based on the affected chemical manufacturing processes not being subject to 35 IAC 215 Subpart Q, Leaks from SOCOMI equipment, because the chemical processes do not manufacture any of the chemicals listed in Appendix D of Part 215.

#### 7.4.5 Operational And Production Limits And Work Practices

- a. Each affected loading operation which loads a volatile organic liquid with a vapor pressure of 2.5

psia or greater shall be equipped with a submerged loading pipe, unless the organic material emissions from such loading operation are less than 3.6 kilograms per hour (8 pounds per hour) or the loading area has a throughput of less than 151 cubic meters per day (40,000 gallons per day).

b. Operation of Flare Controlling HAP Emissions from Five Loading Racks

The Permittee has voluntarily chosen to use a flare to control HAP emissions from five loading racks (in Buildings #3, 16, 22, 39 and 83; note that a rack may have more than one bay). If the Permittee continues to operate in this manner the flare shall be operated with a flame present at all times when emissions are being vented to the flare in a manner consistent with good air pollution practices such as operating in accordance with 40 CFR 63.11(b) or the emission factor for an uncontrolled loading operation used to make the calculation of HAP emissions during that time period. If the Permittee is unable to maintain its status as a minor source of HAPs, the flare may be shut down or the loading racks not vented to the flare unless operation of the flare is required to comply with any new applicable NESHAP.

7.4.6 Emission Limitations

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

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

If the flare is being operated to reduce HAP emissions from five of the loading racks, the flare shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

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 loading operations to demonstrate compliance with Condition 5.5.1 and 7.4.5, pursuant to Section 39.5(7)(b) of the Act:

- a. The actual VOM emissions from the affected loading operations (tons/year), with supporting calculations.

Note that as emission units the loading operation were kept separate from the chemical processes, but the records for emissions from loading may be integrated into the process calculation and records required by Condition 7.1.9. Note also the requirements of Condition 5.6.2 for records kept by Emission Master™.

- b. Records for operation of the flare are identical to Condition 7.2.8 as the same flare is used for control.

#### 7.4.10 Reporting Requirements

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

- a. Operation without a submerged loading pipe as required by Condition 7.4.5, unless one of the exceptions in Condition 7.4.5 applies, within 30 days of such an occurrence.
- b. Emissions of VOM in excess of the limits specified in Condition 5.5.1 based on the current annual records within 30 days of such an occurrence.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.4.12 Compliance Procedures

- a. Compliance with the operating requirements in Condition 7.4.5 shall be determined by the recordkeeping and reporting requirements in Conditions 7.4.9 and 7.4.10.
- b. Compliance with the VOM emission limitations in Conditions 5.5.1 and 7.4.3 shall be determined by the recordkeeping requirements in Condition 7.4.9 and the following procedure:

Emission Master™ is a software tool designed to assist in estimating emissions from batch operations. Each batch product is scrutinized and broken into individual processing steps. Information from individual process steps is entered into the software. The software calculations, along with other information, including in some cases process knowledge and laboratory samples, is used to create a

mass balance, from which an estimated emission factor is derived. This can then be used with production records through the REAP database to estimate total VOM, NONVOM, CO and HAP for the previous month, and summed on a 12-month rolling average basis. For continuous processes, laboratory data, pilot plant data, plant data, process knowledge, and EPA Method 320 (FTIR) are used to develop mass balances, and emission factors are calculated from those mass balances.

7.5 Unit: Waste Water Treatment System  
Control: None

7.5.1 Description

The chemical manufacturing facilities of the 3M Cordova Specialty Materials Division generate wastewater containing organic and other pollutants. These pollutants are removed from the wastewater by means of a wastewater treatment system before the wastewater is discharged.

Wastewater produced by the 3M Cordova manufacturing facility originates from several different sources. Each wastewater stream has its own particular characteristics and is treated accordingly. In general, wastewater streams from the organic chemical manufacturing operations are treated in the organic (biological) wastewater treatment system. This is the primary source of VOM emissions in the wastewater treatment system. Wastewater from the fluorochemical operations, are treated in a physical chemical treatment process that is designed to remove inorganic fluoride before being discharged to the organic treatment system. All wastewaters are combined and treated in two polishing ponds. Flow from the final polishing pond is blended with the plant's non-contact process water before final discharge.

The sources of VOM emissions from the organic (biological) wastewater treatment system are:

- Two Primary Settling Tanks
- Equalization Tank #1
- Equalization Tank #2
- Aeration Tank
- Two Final Settling Tanks Following the Aeration Tank

7.5.2 List of Emission Equipment and Pollution Control Equipment

| Description                  | Control Equipment |
|------------------------------|-------------------|
| Waste Water Treatment System | None              |

7.5.3 Applicable Provisions

- a. An "affected Waste water treatment system" for the purpose of these unit specific conditions is a wastewater emission source described in conditions 7.5.1 and 7.5.2.
- b. 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 affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this

Subpart shall apply only to photochemically reactive material as defined in 35 IAC 211.4690 [35 IAC 215.301].

7.5.4 Non-Applicable Regulations

This permit is issued based on the source not being subject to 35 IAC 215.141 because the affected Waste water treatment system is not an effluent water separator.

7.5.5 Operational and Production Limits and Work Practices

N/A

7.5.6 Emission Limitations

In addition to the source-wide emission limitations in Condition 5.5, the affected waste water treatment system is subject to the following:

N/A

7.5.7 Testing Requirements

None

7.5.8 Monitoring Requirements

N/A

7.5.9 Recordkeeping Requirements

The Permittee shall maintain monthly records of the following items for the affected waste water treatment system to demonstrate compliance with Condition 5.5 pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall maintain a logbook for the operation of the affected wastewater treatment system that includes the following information pursuant to Section 39.5(7) (b) of the Act:
  - i. Operating rate of the wastewater treatment system, in gallons of influent water per hour, on at least a weekly basis.
  - ii. Annual emissions of HAP and VOM, in tons, with supporting calculations.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with an emission limit as follows pursuant to Section 39.5(7) (f) (ii) of the Act:

N/A

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

Emissions shall be calculated using the WATER9 program or any updates issued by the USEPA.

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

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

This permit shield does not extend to applicable requirements which are promulgated after August 18, 2003 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

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

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

### 8.3 Emissions Trading Programs

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

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

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this

permit, provided that [Section 39.5(12) (a) (i) of the Act]:

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

#### 8.5 Testing Procedures

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

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

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

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

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

### 8.6.2 Test Notifications

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

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

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

#### 8.6.3 Test Reports

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

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

#### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
  - i. Illinois EPA - Air Compliance Section  
  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (MC 40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Regional Field Office  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

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

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

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

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

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

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

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters specified in the permit, at any emission point of discharge to the environment:
  - i. At reasonable times, for the purposes of assuring permit compliance; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

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

#### 9.5 Liability

##### 9.5.1 Title

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

##### 9.5.2 Liability of Permittee

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

##### 9.5.3 Structural Stability

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

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

#### 9.5.5 Property Rights

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

### 9.6 Recordkeeping

#### 9.6.1 Control Equipment Maintenance Records

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

#### 9.6.2 Records of Changes in Operation

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

#### 9.6.3 Retention of Records

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

### 9.7 Annual Emissions Report

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

### 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7) (p) (v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

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

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

#### 9.9 Certification

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

#### 9.10 Defense to Enforcement Actions

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

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

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
  - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
  - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

#### 9.11 Permanent Shutdown

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

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

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

#### 9.12.2 Reopening and Revision

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

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

#### 9.12.3 Inaccurate Application

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

#### 9.12.4 Duty to Provide Information

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

#### 9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

#### 9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from 3 Process Emission Units

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

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

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

Where:

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

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

|   | Metric | English |
|---|--------|---------|
| P | Mg/hr  | Ton/hr  |
| E | kg/hr  | Lb/hr   |
| A | 1.214  | 2.54    |
| B | 0.534  | 0.534   |

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

|   | Metric | English |
|---|--------|---------|
| P | Mg/hr  | Ton/hr  |
| E | kg/hr  | Lb/hr   |
| A | 11.42  | 24.8    |
| B | 0.16   | 0.16    |

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

| Metric |       | English |       |
|--------|-------|---------|-------|
| P      | E     | P       | E     |
| Mg/hr  | kg/hr | ton/hr  | lb/hr |
| 0.05   | 0.25  | 0.05    | 0.55  |
| 0.1    | 0.29  | 0.10    | 0.77  |
| 0.2    | 0.42  | 0.2     | 1.10  |
| 0.3    | 0.64  | 0.30    | 1.35  |
| 0.4    | 0.74  | 0.40    | 1.58  |
| 0.5    | 0.84  | 0.50    | 1.75  |
| 0.7    | 1.00  | 0.75    | 2.40  |
| 0.9    | 1.15  | 1.00    | 2.60  |
| 1.8    | 1.66  | 2.00    | 3.70  |
| 2.7    | 2.1   | 3.00    | 4.60  |
| 3.6    | 2.4   | 4.00    | 5.35  |
| 4.5    | 2.7   | 5.00    | 6.00  |
| 9.0    | 3.9   | 10.00   | 8.70  |
| 13.0   | 4.8   | 15.00   | 10.80 |
| 18.0   | 5.7   | 20.00   | 12.50 |
| 23.0   | 6.5   | 25.00   | 14.00 |
| 27.0   | 7.2   | 30.00   | 15.60 |
| 32.0   | 7.7   | 35.00   | 17.00 |
| 36.0   | 8.2   | 40.00   | 18.20 |
| 41.0   | 8.8   | 45.00   | 19.20 |
| 45.0   | 9.3   | 50.00   | 20.50 |
| 90.0   | 13.4  | 100.00  | 29.50 |
| 140.0  | 17.0  | 150.00  | 37.00 |
| 180.0  | 19.4  | 200.00  | 43.00 |
| 230.0  | 22.0  | 250.00  | 48.50 |
| 270.0  | 24.0  | 300.00  | 53.00 |
| 320.0  | 26.0  | 350.00  | 58.00 |
| 360.0  | 28.0  | 400.00  | 62.00 |
| 408.0  | 30.1  | 450.00  | 66.00 |
| 454.0  | 30.4  | 500.00  | 67.00 |

Where:

P = Process weight rate in Mg/hr or T/hr; and  
E = Allowable emission rate in Kg/hr or lbs/hr

10.1.2 Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972 (Existing Process Emission Units)

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

- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation [35 IAC 212.322(b)]:

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

Where:

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

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

|   | Metric | English |
|---|--------|---------|
| P | Mg/hr  | ton/hr  |
| E | kg/hr  | lb/hr   |
| A | 1.985  | 4.10    |
| B | 0.67   | 0.67    |

- ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

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

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

| P     | Metric | English | E      |
|-------|--------|---------|--------|
| Mg/hr | kg/hr  | T/hr    | lbs/hr |
| 0.05  | 0.27   | 0.05    | 0.55   |
| 0.1   | 0.42   | 0.10    | 0.87   |
| 0.2   | 0.68   | 0.20    | 1.40   |
| 0.3   | 0.89   | 0.30    | 1.83   |
| 0.4   | 1.07   | 0.40    | 2.22   |
| 0.5   | 1.25   | 0.50    | 2.58   |
| 0.7   | 1.56   | 0.75    | 3.38   |
| 0.9   | 1.85   | 1.00    | 4.10   |
| 1.8   | 2.9    | 2.00    | 6.52   |
| 2.7   | 3.9    | 3.00    | 8.56   |
| 3.6   | 4.7    | 4.00    | 10.40  |
| 4.5   | 5.4    | 5.00    | 12.00  |
| 9.    | 8.7    | 10.00   | 19.20  |
| 13.   | 11.1   | 15.00   | 25.20  |
| 18.   | 13.8   | 20.00   | 30.50  |
| 23.   | 16.2   | 25.00   | 35.40  |

| P     | Metric | English | E      |
|-------|--------|---------|--------|
| Mg/hr | E      | P       | lbs/hr |
|       | kg/hr  | T/hr    |        |
| 27.2  | 18.15  | 30.00   | 40.00  |
| 32.0  | 18.8   | 35.00   | 41.30  |
| 36.0  | 19.3   | 40.00   | 42.50  |
| 41.0  | 19.8   | 45.00   | 43.60  |
| 45.0  | 20.2   | 50.00   | 44.60  |
| 90.0  | 23.2   | 100.00  | 51.20  |
| 140.0 | 25.3   | 150.00  | 55.40  |
| 180.0 | 26.5   | 200.00  | 58.60  |
| 230.0 | 27.7   | 250.00  | 61.00  |
| 270.0 | 28.5   | 300.00  | 63.10  |
| 320.0 | 29.4   | 350.00  | 64.90  |
| 360.0 | 30.0   | 400.00  | 66.20  |
| 400.0 | 30.6   | 450.00  | 67.70  |
| 454.0 | 31.3   | 500.00  | 69.00  |

Where:

P = Process weight rate in Mg/hr or T/hr; and  
E = Allowable emission rate in Kg/hr or lbs/hr

10.2 Attachment 2 - Details of Storage Tanks<sup>a</sup>

| <u>Tank No.</u> | <u>Capacity<br/>(M-Gal)</u> | <u>Vapor<br/>Pressure<sup>b</sup></u> | <u>HAP<br/>Material</u> | <u>Type</u>             | <u>Shape</u> | <u>Submerged<br/>Fill Pipe</u> | <u>Year<br/>Built</u> |
|-----------------|-----------------------------|---------------------------------------|-------------------------|-------------------------|--------------|--------------------------------|-----------------------|
| 1-1-A-1-T       | 50                          | A                                     | No                      | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-3-T       | 50                          | A                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-5-T       | 50                          | A                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1669                  |
| 1-1-A-7-T       | 50                          | B                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-9-T       | 50                          | A                                     | Yes                     | Fixed Roof <sup>b</sup> | Vertical     | Yes                            | 1969                  |
| 1-1-A-11-T      | 50                          | B                                     | No                      | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-13-T      | 50                          | B                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-15-T      | 50                          | A                                     | No                      | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-17-T      | 50                          | Not a VOM                             | No                      | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-19-T      | 50                          | B                                     | No                      | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-21-T      | 50                          | A                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-1-A-26-T      | 50                          | A                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1973                  |
| 1-1-A-28-T      | 50                          | B                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1973                  |
| 1-1-A-29-T      | 100                         | B                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1973                  |
| 1-1-A-30-T      | 50                          | A                                     | Yes                     | Fixed Roof              | Vertical     | Yes                            | 1973                  |
| 1-1-A-39-T      | 50                          | B                                     | Yes                     | Fixed Roof <sup>b</sup> | Vertical     | Yes                            | 1975                  |
| 1-1-A-48-T      | 200                         | A                                     | No                      | Fixed Roof              | Vertical     | Yes                            | 1969                  |
| 1-2-A-1-T       | 30                          | A                                     | No                      | Pressure                | Horizontal   | No                             | 1969                  |
| 1-3-A-1-T       | 20                          | A                                     | No                      | Pressure                | Horizontal   | No                             | 1997                  |
| 1-3-A-2-T       | 17                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-3-T       | 20                          | A                                     | No                      | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-5-T       | 20                          | A                                     | No                      | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-6-T       | 20                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-8-T       | 20                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-9-T       | 20                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-11-T      | 20                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-13-T      | 20                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-14-T      | 30                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-15-T      | 20                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 1-3-A-16-T      | 20                          | B                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1997                  |
| 23-4-A-1-T      | 20                          | A                                     | Yes                     | Fixed Roof              | Vertical     | No                             | 1995                  |
| 23-98-A-1-T     | 30                          | B                                     | Yes                     | Underground             | Horizontal   | Yes                            | 1985                  |
| 23-98-A-2-T     | 30                          | A                                     | Yes                     | Underground             | Horizontal   | Yes                            | 1985                  |

| <u>Tank No.</u> | <u>Capacity<br/>(M-Gal)</u> | <u>Vapor<br/>Pressure<sup>b</sup></u> | <u>HAP<br/>Material</u> | <u>Type</u> | <u>Shape</u> | <u>Submerged<br/>Fill Pipe</u> | <u>Year<br/>Built</u> |
|-----------------|-----------------------------|---------------------------------------|-------------------------|-------------|--------------|--------------------------------|-----------------------|
| 23-98-A-3-T     | 30                          | B                                     | Yes                     | Underground | Horizontal   | Yes                            | 1985                  |
| 23-98-A-4-T     | 30                          | B                                     | Yes                     | Underground | Horizontal   | Yes                            | 1985                  |
| 23-98-A-5-T     | 30                          | B                                     | Yes                     | Underground | Horizontal   | Yes                            | 1985                  |
| 23-98-A-6-T     | 30                          | B                                     | Yes                     | Underground | Horizontal   | Yes                            | 1985                  |
| 23-98-A-7-T     | 30                          | A                                     | Yes                     | Underground | Horizontal   | Yes                            | 1985                  |
| 20-98-A-2       | 20                          | A                                     | Yes                     | Fixed Roof  | Vertical     | No                             | 1975                  |
| 20-98-A-6       | 4                           | B                                     | No                      | Pressure    | Vertical     | No                             | 1975                  |
| 20-98-A-16      | 6                           | >2.5                                  | No                      | Pressure    | Vertical     | No                             | 1979                  |
| 20-98-A-26      | 30                          | B                                     | No                      | Pressure    | Horizontal   | No                             | 1956                  |
| 20-98-A-27      | 15                          | >2.5                                  | No                      | Pressure    | Vertical     | Yes                            | 1992                  |
| 20-98-A-28      | 15                          | A                                     | No                      | Pressure    | Vertical     | Yes                            | 1992                  |
| 20-98-A-29      | 15                          | B                                     | Yes                     | Pressure    | Vertical     | Yes                            | 1992                  |
| 20-98-A-30      | 15                          | A                                     | No                      | Pressure    | Vertical     | Yes                            | 1995                  |

<sup>a</sup> All tanks have conservation vents

<sup>b</sup> Voluntarily vented to flare

A = <0.5 psia, B = 0.5 - 2.5 psia

This attachment lists the storage tank data at the time of permit issuance. As indicated in Condition 7.2.11, the Permittee is allowed to change the material stored in a tank at their discretion, so long as the tank continues to comply with the conditions in Section 7.2 of this permit.

10.3 Attachment 3 - 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: \_\_\_\_\_

#### 10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
  - Corrects typographical errors;
  - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - Requires more frequent monitoring or reporting by the Permittee;
  - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Illinois EPA;
  - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
  - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.
2. Minor Permit Modification
  - Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



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

|   |                                  |
|---|----------------------------------|
| <b>Application For Construction Permit (For CAAPP Sources Only)</b> | <b>For Illinois EPA use only</b> |
|   | I.D. number:                     |
|   | Permit number:                   |
|   | Date received:                   |

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

| <b>Source Information</b>   |              |                 |
|---|--------------|-----------------|
| 1. Source name:   |              |                 |
| 2. Source street address:   |              |                 |
| 3. City:  | 4. Zip code: |                 |
| 5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No |              |                 |
| 6. Township name:   | 7. County:   | 8. I.D. number: |

| <b>Owner Information</b> |            |               |
|--------------------------|------------|---------------|
| 9. Name:                 |            |               |
| 10. Address:             |            |               |
| 11. City:                | 12. State: | 13. Zip code: |

| <b>Operator Information (if different from owner)</b> |            |               |
|---|------------|---------------|
| 14. Name  |            |               |
| 15. Address:  |            |               |
| 16. City:   | 17. State: | 18. Zip code: |

| <b>Applicant Information</b>  |  |
|---|--|
| 19. Who is the applicant?<br><input type="checkbox"/> Owner <input type="checkbox"/> Operator | 20. All correspondence to: (check one)<br><input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source |
| 21. Attention name and/or title for written correspondence:                                   |  |
| 22. Technical contact person for application:   | 23. Contact person's telephone number:   |

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

| <b>Summary Of Application Contents</b>  |  |
|---|--|
| 1. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs:<br>a) Non-attainment New Source Review – 35 IAC Part 203;<br>b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21;<br>c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 2. Does the application identify and address all applicable emissions standards, including those found in the following:<br>a) Board Emission Standards – 35 IAC Chapter I, Subtitle B;<br>b) Federal New Source Performance Standards – 40 CFR Part 60;<br>c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?  | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?  | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA?<br>Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information. | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| 29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br><input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application |

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

| <b>Signature Block</b>   |                    |
|--|--------------------|
| This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.   |                    |
| 30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.<br>Authorized Signature: |                    |
| BY:  | _____              |
| _____  | _____              |
| AUTHORIZED SIGNATURE   | TITLE OF SIGNATORY |
| _____  | _____/_____/_____  |
| TYPED OR PRINTED NAME OF SIGNATORY   | DATE               |

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

## 10.6 Attachment 6 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance certification for the source. For this purpose, the Illinois EPA will accept a copy of the most recent form 401-CAAPP, ANNUAL COMPLIANCE CERTIFICATION submitted to the Illinois EPA.
3. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
4. Information addressing any outstanding transfer agreement pursuant to the ERMS.
5.
  - a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.
  - b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance

with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

DGP:psj