

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Morton International, Inc.  
Attn: David J. Slivka  
2401 East Pratt Blvd.  
Elk Grove Village, Illinois 60007

Application No.: 72100457                      I.D. No.: 031440AAZ  
Applicant's Designation: M1-M15 ST3        Date Received: June 15, 1999  
Subject: Mixers M1-M15 and Mixer ST3  
Date Issued:                                      Expiration Date:  
Location: 2401 E. Pratt Blvd, Elk Grove Village

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 14 process vessels (EP24-EP38) each controlled by condensers, 15 storage tanks (EP3-EP17) with vapor recovery, bucket elevators with baghouse (EP18), 4 above ground storage tanks with condensers (EP19-EP22), 1 catalyst solution tank (EP23), 1 kettle tank (EP31), 1 repackaging operation (EP39), 1 morprime operation (EP40), 1 drum mixer (EP41) and Solvent Meter Vapor Condenser (EP42) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for VOM). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
  - c. This permit supersedes all operating permits issued for this location.
- 2a. Operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Vapor Pressure of VOMs Referenced to 50°F (psia)</u>
T101	2.83
T201	2.83
T301	2.83
T401	2.83

<u>Item of Equipment</u>	<u>Vapor Pressure of VOMs Referenced to 50EF (psia)</u>
T501	2.83
T601	2.83
T701	2.83
T801	2.83
T901	2.83
T1001	2.83
T1101	2.83
T1201	2.83
T1301	2.83
T1401	2.83
T1501	2.83
12 Polychem	1.049
14A	1.049
14B	1.049
14C	1.049

- b. The total throughput for the above tanks shall not exceed 2.5 million gallons/year.
- c. The total VOM emissions, including fugitive leaks, shall not exceed 0.67 tons/year.
- d. Compliance with annual limits shall be determined from a running total of 12 months of data.

3a. Operation of the source shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Total Combined Annual Production (Lb/Yr)</u>	<u>Total Combined VOM Emissions (Ton/Yr)</u>
Process Equipment*	26,500,000	24.1

\* The process equipment consists of: Catalyst tank EP23, Kettle tank EP31, Mixer 1 EP24, Mixer 2 EP25, Mixer 3 EP26, Mixer 5 EP27, Mixer 6 EP28, Mixer 7 EP29, Mixer 8 EP30, Mixer 10 EP32, Mixer 11 EP33, Mixer 15 EP34, Mixer 16 EP35, Mixer 17 EP36, Mixer 19 EP37, Mixer 20 EP38, Refilling EP39, Morprime process EP40, Drum mixer EP41, Solvent Meter Vapor Condenser EP42

- b. The emissions of particulate matter from all the process tanks listed in Special Condition 3a shall not exceed 2.2 tons/yr.
- c. Compliance with annual limits shall be determined from a running total of 12 months of data.

4. This permit is issued based on VOM emission units at the Elk Grove Village plant not being subject to the requirements of Subpart QQ and TT of the 35 Ill. Adm. Code Part 218. This is a consequence of the voluntary limits placed on production contained in this federally enforceable permit.
5. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
  - a. Name of solvents contained in each tank, the vapor pressures and throughputs.
  - b. Monthly and annual production for the process equipment listed in Condition 3.
  - c. Maintenance records on leaks and repairs.
  - d. The temperature of the cooling water supplied to the condensers and the temperature of the cooling water returned to the cooling tower.
  - e. Actual and potential emissions of VOM.
  - f. Actual emissions of any Hazardous Air Pollutant (HAP).
6. The Permittee shall notify the Illinois EPA of any new solvents stored in the tanks if the vapor pressure exceeds that listed in Special Condition #2 or the new solvent is a listed Hazardous Air Pollutant.
7. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
8. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.

9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
10. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Eisenhower Tower  
1701 South First Avenue  
Maywood, Illinois 60153

11. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: total annual production (lb/year).

Please note that this permit is revised to no longer include the 2 boilers (EP1, EP2) as they are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(d).

If you have any questions on this, please call John Blazis at 217/782-2113.

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

DES:JB:jar

cc: Region 1  
Compliance Section  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from this source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1a. VOM Emissions

i. <u>Item of Equipment</u>	<u>Total Combined Annual Throughput VOM (Gal/Yr)</u>	<u>Total Combined VOM Emissions (Ton/Yr)</u>
Storage Tanks and Fugitive Leaks	2.5 million	0.67

  

ii. <u>Item of Equipment</u>	<u>Total Combined Annual Production (Lb/Yr)</u>	<u>Total Combined VOM Emissions (Ton/Yr)</u>
Process Equipment*	26,500,000	24.1

\* The process equipment consists of: Catalyst tank EP23, Kettle tank EP31, Mixer 1 EP24, Mixer 2 EP25, Mixer 3 EP26, Mixer 5 EP27, Mixer 6 EP28, Mixer 7 EP29, Mixer 8 EP30, Mixer 10 EP32, Mixer 11 EP33, Mixer 15 EP34, Mixer 16 EP35, Mixer 17 EP36, Mixer 19 EP37, Mixer 20 EP38, Refilling EP39, Morprime process EP40, Drum mixer EP41, Solvent Meter Vapor Condenser EP42

- b. The storage tank emissions are based on the vapor pressures for each solvent contained in the tank, the breathing and working losses (with 90 percent vapor recovery) using AP-42 calculations.
- c. The mixing and process tank emissions are based on the potential charging losses, line purge losses, heatup losses, wash losses, and filling washes with 50% control efficiencies of condensers using water and 75% control efficiencies of condensers using chilled water (as appropriate).

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