



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov.
Center

**RE: FINAL PERMIT TO INSTALL
PREBLE COUNTY**

CERTIFIED MAIL

Application No: 08-04205

DATE: 01/04/2001

Morton International Inc-W Alexandria
Gerald Winkler
10 S Electric St
W Alexandria, OH 45381-0000

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

RAPCA



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: January 4, 2001
Effective Date: January 4, 2001**

FINAL PERMIT TO INSTALL 08-04205

Application Number: 08-04205
APS Premise Number: 0868090072
Permit Fee: **\$200**
Name of Facility: Morton International Inc-W Alexandria
Person to Contact: Gerald Winkler
Address: 10 S Electric St
W Alexandria, OH 45381-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:

**10 S Electric St
W Alexandria, Ohio**

Description of proposed emissions unit(s):

water-based adhesive products and materials: mixing vessel TK-1001, stripping vessel R-1002, finishing tank TK-1003.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS**A. Permit to Install General Terms and Conditions****1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

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information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional

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facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

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14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
organic compounds	0.74

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P051 - 500 gal. mixing vessel, TK1001 with condenser; 150 gal. emulsifier feed tank, TK1001-2; 1000 gal. stripping vessel R-1002, with condenser; 400 gal. receiver tank, TK1002-1; 750 gal. final mixing tank TK1003; venting to regenerative thermal oxidizer	OAC rule 3745-31-05 (A)(3) OAC rule 3745-35-07 (B) OAC rule 3745-21-07 (G)(2)	0.17 lb/hr organic compound (OC), 4.08 lbs/day OC, 0.74 TPY OC, on a rolling 12-month basis The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a The 0.17 lb/hr and 4.08 lbs/day organic compound emission limitations were established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b The organic compound (OC) emissions from this emissions unit, shall be controlled through the application of a regenerative thermal oxidizer, operating at a minimum of 97% destruction efficiency.

B. Operational Restrictions

1. The permittee shall limit the production of the water based adhesives to 750 tons per year (1,500,000 lbs/yr), on a rolling 12-month basis.

IssueEmissions Unit ID: **P051**

The permittee shall comply with the rolling 12-month production rate and OC emission limitations, and monitoring and record keeping requirements upon startup under this permit, by use of data from the previous 12 months of operation.

2. The average combustion temperature within the regenerative thermal oxidizer, for any 3-consecutive hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
3. The condensers installed for this reactor and mixing vessel are not operated primarily to control VOC loss. The units are operated as reflux condensers with the primary purpose of capturing and condensing any solvent (VOC) that is evolved during crucial batch periods and returning it to the reaction. The solvent reflux serves a vital role by controlling such parameters as reaction time and temperature. The reflux condensers predominantly function to regulate and control the physical and chemical reaction that takes place in the affected equipment. In order to ensure that the condensers are operating properly to reflux solvent, the water shall be flowing to each condenser during the full duration of a batch.
4. The facility wide limits established in PTI 08-3851 issued on November 24, 1999 shall be retained in this PTI. The HAP emissions are limited through the rolling 12-month production rate limitations and the use of air pollution control equipment.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the regenerative thermal oxidizer when the emissions units are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information for each day:
 - a. All 3-consecutive hour blocks of time during which the average combustion temperature within the regenerative thermal oxidizer, when the emissions units were in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
 - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions units were in operation.

3. The permittee shall monitor and record that water is flowing to each condenser at the beginning and at the end of each batch operation.
4. The permittee shall maintain monthly records of the following information for the production of waterbased adhesives.
 - a. The production rate for each month, in tons.
 - b. The rolling, 12-month summation of the production rates, in tons.
5. The permittee shall collect and record the following information each month for this operation.
 - a. The company identified category for material produced.
 - b. The number of pounds of each organic material employed.
 - c. The hazardous air pollutant (HAP) content of each organic material, in pounds per batch.
 - d. The total controlled HAP emission rate for all organic materials, in pounds per month (i.e., calculated using the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance).
 - e. The total individual HAP emissions for each HAP from all material produced, in tons, as a 12-month rolling limit.
 - f. The total combined HAP emissions from all material produced, in tons, as a 12-month rolling limit.

A listing of the HAPs can be found in Section 112 (b) of Title III in the Clean Air Act. This information does not have to be maintained on a line-by-line basis.

D. Reporting Requirements

1. The permittee shall submit semi-annual reports which specify the following information. The reports shall be submitted by January 31 and July 31 of each year and shall cover the previous six months.
 - a. The total organic compound emission rates from this emissions unit, in tons per year, as a 12-month rolling limit.

Mort**PTI**Emissions Unit ID: **P051****Issued: January 4, 2001**

- b. The production limit for this emissions unit in tons per year, as a 12-month rolling limit.
 - c. The individual HAP emission limits, in tons per year, as a rolling 12-month limit.
 - d. The total combined HAP emission limit, in tons per year, as a rolling 12-month limit.
2. The permittee shall submit deviation (excursion) reports which identify all 3-consecutive hour blocks of time during which the average combustion temperature within the regenerative thermal oxidizer does not comply with the temperature limitation specified above.
3. The permittee shall submit quarterly reports for each condenser which documents the instances of any batch where verification that water was flowing to the condenser was not made; the cause of the condition and the corrective action taken to prevent its reoccurrence.
4. The reports shall be submitted in accordance with General Term and Condition A.1.c.

Mort**PTI****Issued: January 4, 2001**Emissions Unit ID: **P051****E. Testing Requirements**

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitation-
0.17 lb/hr OC

Applicable Compliance Method-

This emission limitation was established by dividing the annual water based adhesives production rate of 750 TPY by 8760 hrs/yr and multiplying by the emission factor provided by the permittee of 1.98 lbs OC/ton of product manufactured. The emission factor assumes 97% destruction efficiency from the regenerative thermal oxidizer.

- 1.b Emission Limitation-
4.08 lbs/day OC

This emission limitation was established by multiplying the maximum hourly rate of 0.17 lb/hr by 24 hrs/day.

- 1.c Emission Limitation-
0.74 TPY OC, on a rolling 12-month basis

This emission limitation was established by multiplying the water based adhesives production rate, of 750 TPY by the emission factor provided by the permittee of 1.98 lbs OC/ton of product manufactured and dividing by 2000 lbs/ton. Compliance with this emission limitation shall be determined by multiplying the monthly production rate, in tons as determined in section C.4., by the emission factor provided by the permittee of 1.98 lbs OC/ton of product manufactured, summing the monthly emission rates for the year and dividing by 2000 lbs/ton.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 08-04205 Facility ID: 0868090072

FACILITY NAME Morton International Inc-W Alexandria

FACILITY DESCRIPTION water-based adhesive products and materials: mixing vessel TK-1001, stripping vessel R-1002, finishing tank TK-1003. CITY/TWP W Alexandria

SIC CODE 2891 SCC CODE 4-90-999-98 EMISSIONS UNIT ID P051

EMISSIONS UNIT DESCRIPTION 500 gal. mixing vessel, TK1001 with condenser; 150 gal. emulsifier feed tank, TK1001-2; 1000 gal. stripping vessel R-1002, with condenser; 400 gal. receiver tank, TK1002-1; 750 gal. final mixing tank TK1003

DATE INSTALLED

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds	attainment	0.17 lb/hr OC	0.74	0.17 lb/hr OC	0.74
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination: BAT is compliance with the applicable regulations and specified allowable emission limitations thru the application of condensers and the regenerative thermal oxidizer; record keeping; reporting

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES x NO

IDENTIFY THE AIR CONTAMINANTS: