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Facility Name: **Ashta Chemicals Inc**

Application Number: **02-2107**

Date: **August 26, 1998**

**GENERAL PERMIT CONDITIONS**

**TERMINATION OF PERMIT TO INSTALL**

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

**NOTICE OF INSPECTION**

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

**CONSTRUCTION OF NEW SOURCES**

The proposed source(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 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 source(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 Ohio Administrative Code (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.

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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 cannot meet applicable standards.

#### **PERMIT TO INSTALL FEE**

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

#### **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.

#### **APPLICABILITY**

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

#### **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.

#### **PERMIT TO OPERATE APPLICATION**

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

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**SOURCE OPERATION 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 and regulations.

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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Ashta Chemicals Inc** located in **Ashtabula** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P008	Chloropicrin/ Telone II Blending	Use of a carbon adsorption system to control organic compound emissions.	3745-31-05	6.11 and 1.12 TPY of OC emissions.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
OC	1.12

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

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#### **REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087.**

#### **WASTE DISPOSAL**

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

#### **MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

#### **MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

#### **AIR POLLUTION NUISANCES PROHIBITED**

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

#### **NINETY DAY OPERATING PERIOD**

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests

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conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

#### **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.

#### **ADDITIONAL SPECIAL TERMS AND CONDITIONS**

##### **A. Introduction**

This permit is for a new process (P008) Chloropicrin/Telone II Blending. Telone II is also known as 1,3 dichloropropene.

##### **B. Operational Restrictions**

1. The temperature of each carbon canister system, shall not be greater than 130 degrees Fahrenheit.
2. This permit allows for the use of the materials specified by the permittee in the application for a Permit to Install. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the organic compound emission limitations specified in this permit were established in accordance with the Ohio EPA's "Air Toxics Policy" and are based on both the material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the TSCREEN model and a comparison of the predicted 1 hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

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Emission Unit(s) ID	Pollutant	Threshold Limit Value (TLV) ( $\mu\text{g}/\text{m}^3$ )	Maximum Hourly Emission Rate (lbs/hr)	Predicted 1 Hour Maximum Ground Level Concentration ( $\mu\text{g}/\text{m}^3$ )	Maximum Acceptable Ground Level Concentration (MAGLC), ( $\mu\text{g}/\text{m}^3$ )
P008	1,3 dichloro-propene	4,500	0.317	420.4	450

Any of the following changes may be deemed a "modification" to the emissions unit(s) and, as such, prior notification to and approval from the Ohio EPA are required:

- a. any changes in the composition of the materials, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
- b. any change to the emissions unit(s) or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table; and,
- c. any change to the emissions unit(s) or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.

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**C. Monitoring and/or Record keeping Requirements**

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the carbon canister system when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall collect and record the following information each day:
  - a. the temperature of each carbon canister system; and,
  - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

**D. Reporting Requirements**

1. The permittee shall submit temperature deviation (excursion) reports that identify all periods during which the temperature of the carbon canister system(s) exceeded the temperature limitation specified above.

**E. Testing Requirements**

1. Compliance with the emissions limitation(s) in the air Emission Summary of this permit shall be determined in accordance with the following methods(s):
  - a. Emission Limitation(s)  
6.11 lbs /day of OC emissions

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Applicable Compliance Method

To determine the actual worst case emission rate for organic compounds the permittee shall employ the following:

- i. determination of daily emissions of 1,3 dichloropropene, E (1,3 dichloropropene), from the surge tank and blending operations in lbs/day:

$$E (1,3 \text{ dichloropropene}) = (\text{EF}_{1,3 \text{ dichloropropene SURGE}} + \text{EF}_{1,3 \text{ dichloropropene BLEND}}) \times \text{TK/day} \times (1 - C)$$

$\text{EF}_{1,3 \text{ dichloropropene SURGE}}$  = emission factor for uncontrolled 1,3 dichloropropene from the surge tank; 4.66 lbs/tank as determined from the ideal gas law.

$\text{EF}_{1,3 \text{ dichloropropene BLEND}}$  = emission factor for uncontrolled 1,3 dichloropropene from the blend tank; 32.37 lbs/tank as determined from the ideal gas law.

TK = maximum number of surge/blend tank pairs, which is (3) batches/day.

C = control efficiency of vapor control device, according to manufacturer's specifications.

- ii. determination of daily emissions of chloropicrin, E (chloropicrin), from the blending operations in lbs/day:

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$E$  (chloropicrin) =

$Ef_{\text{chloropicrin BLEND}} \times \text{TK/day} \times (1 - C)$

$EF_{\text{chloropicrin BLEND}}$  = emission factor for uncontrolled chloropicrin from the blend tank; 3.75 lbs/tank as determined from the ideal gas law.

iii. determination of total, daily emissions of organic compounds,  $E(\text{OC})$ , from all operations in lbs/day:

$E(\text{OC}) = E$  (1,3 dichloropropene)  
+  $E$  (chloropicrin)

b. Emission Limitation(s)

1.12 TPY of OC emissions

Applicable Compliance Method

Compliance determination shall be the sum of the daily OC emission rates for the calendar year, divided by 2000.

**F. Miscellaneous Requirements**

None