

1

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

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 SOURCE(S)

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 Ohio 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

2

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

(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.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 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

3

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

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 made at least 90 days prior to start-up of the source.

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

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for 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.

4

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**
Application Number: **01-7364**
Date: **December 8, 1999**

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate matter,	1.8
Volatile organic compounds	4.6

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207-3417.**

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.

7

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

8

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

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, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207-3417.**

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.

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. Operational Restrictions

1. The maximum annual production rate for this emissions unit shall not exceed 600,000 pounds of fiberglass, based upon a rolling 12-month summation of the production rates. To ensure enforceability during the first 12 calendar months of operation following the issuance of

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Cumulative Production</u>
1	50,000
1-2	100,000
1-3	150,000
1-4	200,000
1-5	250,000
1-6	300,000
1-7	350,000
1-8	400,000
1-9	450,000
1-10	500,000
1-11	550,000
1-12	600,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

2. The maximum resin content in the fiberglass shall not exceed 50 percent. The maximum styrene content in the resin shall not exceed 55 percent. The maximum solids content in fiberglass shall not exceed 80 percent.
3. The hourly and daily emission limitations were established to reflect the potential to emit for P001. Therefore, it is not necessary to develop recordkeeping and/or recordkeeping requirements to ensure compliance with these limits.

B. Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. the production totals for each month; and,
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit,

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

the rolling, 12-month summation of the production rates.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

2. The permittee shall record the total pounds of resins used each month in emission unit P001.

C. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.
2. The permittee shall notify the Ohio EPA Central District Office in writing of any daily record showing an exceedance of the resin, styrene, and solids contents limitations listed in Section A.2. of these terms and conditions. A copy of such record shall be sent to the Ohio EPA Central District Office within 60 days following the occurrence. The report shall include (a) the probable cause of such deviations, and (b) any corrective actions or preventive measures which have been or will be taken to achieve compliance. The permittee need not file quarterly reports as outlined in the General terms and Conditions.

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

3. The permittee shall submit annual reports which specify the total OC emissions from P001 for the previous calendar year. These reports shall be submitted by January 31 of each year.

D. Testing Requirements

1. Compliance with the emission limitation(s) of the terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation

The yearly particulate matter emissions shall not exceed 1.8 tons per year.

Applicable Compliance Method

Compliance shall be multiplying the particulate matter emission factor (0.75 percent) per AP-42 Chapter 6 section 6.4.1, by the total solids used (pounds/year), and dividing by 2,000 pounds/ton to get particulate matter emissions in tons/year.

b. Emission Limitation

The yearly volatile organic compound emissions shall not exceed 4.6 tons per year.

Applicable Compliance Method

Fiberglass operations - Multiply the total amount of resin used (pounds/yr) with the maximum OC content (55%) and an organic compound emission factor of 5.5% and divide by 2000 lbs/ton to get organic compound emissions in tons/year. The actual pounds of resin used in a year shall be determined by the 12-month summation of the monthly records required by Section B.2.

Resin Mixing-Multiply the gallons of monomer(styrene) used by the loading loss factor (0.0003), and then multiply by a factor of 4. This results in the pounds of monomer emissions assuming four transfers of the monomer. Lastly

12

Facility Name: **ASHLAND CHEMICAL HDQTRS TECH CTR**

Application Number: **01-7364**

Date: **December 8, 1999**

divide by 2000 pounds per ton to get organic compound emissions in tons per year.

Loading Loss Equation (L_i) = $12.46 * ((S * M * P) / (T))$
where:

L_i = loading losses in 0.3309 pound per 1,000 gallons or 0.0003 pound per gallon

S = filling factor for splash filling (1.45)

P = true vapor pressure (0.0932 psi at 70°F)

M = molecular weight (104.15 lb/lb mole)

T = temperature (430°R)

density = 7.544 pounds per gallon

Compliance with the 4.6 tons per year limit shall be determined by adding the organic compound emissions from fiberglass operations and resin mixing.