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Facility Name: **Ashland Chemical Company**

Application Number: **13-3482**

Date: **September 22, 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 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. Approval of the plans in any case is not to be construed as

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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.

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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.

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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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Ashland Chemical Company** located in **Cuyahoga** 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>
P016 Cont'd	
P016	ME-1250 (LP mixer) including charging, mixing and container filling operations

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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BAT
Determination

The BAT
determined for
this source is
DCL Pulse- jet
baghouse with
6000 ACFM fan

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	Applicable Federal & OAC Rules	3745-17-07	Permit Allowable Mass Emissions and/or Control/Usage Requirements	the above mentioned control measure requirements
3745-31-05			Maximum emissions of: 0.95 TPY VOC and HAPs 1,000,000 pounds/year Throughput (solids, VOC, HAPs) as per rolling 12 month period.	Less stringent than, or equal in stringency to, the above mentioned visible emission limitation
			1.0 pounds/hour PM 4.38 TPY PM	
			Visible particulate emissions shall not exceed 5 percent opacity as a six minute average	
			8 pounds/hour and 40 pounds/day VOC and HAPs	
3745-17-11			Less stringent than, or equal in stringency to	

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SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PM	4.38
VOC and HAPs	0.95

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 **Cleveland Air Pollution Control, 1925 St. Clair Avenue, Cleveland, OH 44114.**

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 **Cleveland Air Pollution Control, 1925 St. Clair Avenue, Cleveland, OH 44114.**

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.

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ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 - 6 inches of water while the emissions unit is in operation.
2. The maximum annual throughput shall not exceed 1,000,000 lbs of solids, volatile organic compounds and HAPs per rolling 12 month period.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the throughput employed level specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Throughput:</u>	
1	83,333	lbs
1-2	166,666	lbs
1-3	250,000	lbs
1-4	333,333	lbs
1-5	416,666	lbs
1-6	500,000	lbs
1-7	583,333	lbs
1-8	666,666	lbs
1-9	750,000	lbs
1-10	833,333	lbs
1-11	916,666	lbs
1-12	1,000,000	lbs

B. Monitoring and Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once-per-shift basis.
2. The permittee shall maintain monthly records of the VOC and HAPs usage in the emission unit:

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- a. the name and amount of each VOC/HAP used in each batch, in gallon;
 - b. the vapor pressure of each VOC/HAP used in each batch in pounds per square inch absolute;
 - c. the molecular weight of each VOC/HAP in each batch;
 - d. the temperature of each VOC/HAP in each batch;
 - e. the total VOC/HAPs emission rates for all pastes, slurries and coatings in lbs/hr;
 - f. the total VOC/HAPs emission rates for all pastes, slurries and coatings in lbs/day; and,
 - g. the total VOC/HAPs emission rates for all pastes, slurries and coatings in TPY;
3. The permittee shall maintain monthly records of solid material usage in the emissions unit:
- a. the amount of solids used each batch.
4. The permittee shall keep and maintain records on the premises for a period of five years.

C. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. These reports shall be submitted within 30 days following the end of the calendar month.
2. The permittee shall submit emissions limitations and annual throughput reports identifying any exceedances in VOC/HAP(s) usage and production throughput, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted within 30 days following the end of the calendar month.

D. Testing Requirements

1. Compliance with the emissions limitation(s) of these terms and conditions

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shall be determined in accordance with the following method(s):

a. Emission Limitation

8 lbs/hr VOC/HAPs

Applicable Compliance Method

Compliance shall be based on the recordkeeping requirements as specified in Additional Special Term and Condition B.2. and the following equation:

AP-42, section 5.2 (1/95), "Loading loss equation".

$$E = \frac{12.46 * S * P * M}{T}$$

E = VOC/HAPs emissions (lbs/1000 gallons)
 S = 1.45 saturation factor (1.45 for splash filling)
 P = vapor pressure of material loaded at T (psia)
 M = molecular weight of material loaded
 T = temperature of material loaded (R)=460 + degrees Fahrenheit
 i = index number
 n = total number of materials, days, months, or emission factors

$$E_t = E_c + E_m + E_p$$

E_c = charging VOC/HAPs emissions
 E_m = mixing VOC/HAPs emissions
 E_p = packaging VOC/HAPs emissions
 E_t = total VOC/HAPs emissions (lbs/1000 gal)

$$\text{VOC/HAPs emissions} = \sum_{i=1}^n E_i * (1000 \text{ gallons of VOC/HAPs (i) per hour})$$

b. Emission Limitation

40 lb/day VOC/HAPs

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Applicable Compliance Method

Compliance shall be based on the recordkeeping requirements as specified in Additional Special Term and Condition B.2., the AP-42, section 5.2 (1/95), "Loading loss equation" and the following equation: $E_t =$ total VOC/HAPs emissions (lbs/1000 gal)

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$$\text{VOC/HAPs emissions (per day)} = \sum_{i=1}^n E_i * (1000 \text{ gallons of VOC/HAPs (i) per day})$$

c. Emission Limitation

0.95 ton per rolling 12 month period VOC/HAPs

Applicable Compliance Method

Summation of daily emissions from section D.b. of these terms and conditions for a 365 day rolling period.

d. Throughput Limitation

The maximum annual throughput shall not exceed 1,000,000 lbs of refractories, organic compounds and HAPs per rolling 12 month period.

Applicable Compliance Method

Compliance shall be based on the recordkeeping requirements as specified in Additional Special Term and condition B.2.

e. Emission Limitation

PM: 1.0 lb/hr total

Applicable Compliance Method

Compliance shall be based on AP-42, section 6.4.1 (5/83), using a maximum process weight rate of 4000 lbs/hr, worst case emission factor of 1 percent, 50 percent solids content, baghouse capture efficiency 97 percent and control efficiency 98 percent.

f. Emission Limitation

PM: 4.38 TPY

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Applicable Compliance Method

Compliance shall be based on the hourly rate multiplied by 8760 hrs/year divided by 2000 lbs/ton.

g. Emission Limitation

5 percent visible emissions of PM

Applicable Compliance Method

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).