

1

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 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

2

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

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.

3

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

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.

4

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

5

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

<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>
-------------------------------	-------------------------------------	--------------------------	---	--

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Bayer Corporation** located in **Hamilton** 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 & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P001 (Mod)	Emulsion polymerization process controlled by flare and incineration	Emissions vented to a flare with at least 99 percent control efficiency or to a boiler with at least a 99.99 percent control efficiency and compliance with 40 CFR Part 63, Subpart JJJ	3745-15-07 3745-21-07 (G) (2) * 3745-31-05 40 CFR Part 63, Subpart JJJ	See General Terms Less stringent 23.6 pounds OC/day, 4.31 tons OC/year See Additional Special Terms and Conditions A.3. - A.5.

* The emission limitation(s) established by these rules are less stringent than those established by Ohio Administrative Code rule 3745-31-05 (BAT).

SUMMARY

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	4.31

7

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

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 **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

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

8

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

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

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

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. Applicable Emission Limitations and/or Control Requirements

1. Emissions of organic compounds (OC) from emissions unit P001 shall not exceed 23.6 pounds per day and 4.31 tons per year.
2. All process emissions from emissions unit P001 shall be vented to a flare having a control efficiency of at least 99 percent, or to a boiler for incineration, with a control efficiency of at least 99.99 percent.
3. The flare shall comply with the applicable rules of flare equipment in 40 CFR Part 63, §63.11(b).
4. There shall be no visible emissions from the flare except for periods not to exceed a total of five (5) minutes during any 2 consecutive hours.
5. The permittee shall comply with all applicable emission limitations and/or control requirements of 40 CFR Part 63, Subpart JJJ.

B. Operational Restrictions

1. Emissions vented to the boiler(s) and/or flare shall be introduced into the flame zone of such a device.
2. The permittee shall comply with all applicable operational restrictions specified in 40 CFR Part 63, Subpart JJJ.
3. A pilot flame shall be maintained at all times in the flare's pilot light burner when emissions unit P001 is in operation.

C. Monitoring and Recordkeeping Requirements

1. The permittee shall comply with all applicable monitoring and recordkeeping requirements specified in

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

40 CFR Part 63, Subpart JJJ.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the pilot flame of the flare when emissions unit P001 is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

- a. all periods during which there was no pilot flame **when emissions unit P001 was in operation;**
 - b. all periods during when the flare/monitoring equipment are not operational while emissions unit P001 is in operation; and,
 - c. all periods of time during which the emissions
were not vented to the boiler
when emissions unit P001 is operating.
3. 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, unless otherwise specified in this permit. 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.

D. Reporting Requirements

1. 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 Hamilton County Dept. of Env. Services; and,
 - 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

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

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 Hamilton County Dept. of Env. Services. 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 30, April 30, July 30, and October 30 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).

2. The permittee shall submit semi-annual reports to the Hamilton County Department of Environmental Services which summarize production in tons of polymer intermediates produced in emissions unit P001, during the previous six calendar months. These reports shall be submitted by February 15 and August 15 of each year, and shall cover the previous six calendar months.
3. The permittee shall comply with all applicable reporting requirements of 40 CFR Part 63, Subpart JJJ.
4. The permittee shall submit a Notification of Compliance status within 150 operating days after initial startup. The notification shall contain the information specified in 40 CFR 63.1335(e)(5)(i)-(viii).
5. The permittee shall submit deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time and duration of each such period.

E. Compliance Methods/Testing Requirements

1. Emission Limitation

23.6 pounds OC per day and 4.31 tons OC per year.

Applicable Compliance Method

12

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

Compliance with the emission limitations outlined in Section A.1. shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-4577 submitted April 27, 1998.

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

2. Emission Limitation

No visible emissions from flare except for 5 minutes during any 2 consecutive hours .

Applicable Compliance Method

Compliance shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 22.

3. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for emissions unit P001 in accordance with the requirements of 40 CFR Part 63, Subpart JJJ.

- a. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Dept. of Env. Services.
- b. The emission testing shall be conducted in order to determine that the main duct emission control system is in compliance with 40 CFR Part 63 Subpart JJJ while emissions are being vented to the site's gas/oil fired boilers.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Dept. of Env. Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Dept. of Env. Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Dept. of Env. Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a

Facility Name: **Bayer Corporation**

Application Number: **14-4577**

Date: **May 12, 1999**

valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Dept. of Env. Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Dept. of Env. Services.

F. Miscellaneous Requirements

1. The terms and conditions of PTI 14-4577 shall supersede the terms and conditions of PTI 14-1787.
2. The permittee shall comply with all applicable miscellaneous requirements of 40 CFR Part 63, Subpart JJJ.