



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
LAKE COUNTY
Application No: 02-17449**

CERTIFIED MAIL

| | |
|--|------------------------------|
| | TOXIC REVIEW |
| | PSD |
| | SYNTHETIC MINOR |
| | CEMS |
| | MACT |
| | NSPS |
| | NESHAPS |
| | NETTING |
| | MAJOR NON-ATTAINMENT |
| | MODELING SUBMITTED |
| | GASOLINE DISPENSING FACILITY |

DATE: 4/3/2003

The Lubrizol Corporation
Robert Setele
155 Freedom Rd
Painesville, OH 44077

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 Directors 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,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA
Lake County GHD

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 4/3/2003
Effective Date: 4/3/2003**

FINAL PERMIT TO INSTALL 02-17449

Application Number: 02-17449

APS Premise Number: 0243000024

Permit Fee: **\$400**

Name of Facility: The Lubrizol Corporation

Person to Contact: Robert Setele

Address: 155 Freedom Rd
Painesville, OH 44077

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

**155 Freedom Rd
Painesville, Ohio**

Description of proposed emissions unit(s):

Reactor process AO.

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. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Record keeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written 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. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. 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.

12. 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.

B. State Only Enforceable 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

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping of state-only enforceable 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 state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping 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. Permit Transfers

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

4. 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.

5. 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 facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

6. 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.

7. 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).

8. 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

C. 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> |
|------------------|----------------------|
| VOC | 6 |
| NO ₂ | 7 |

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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> |
|--|--------------------------------------|--|
| <p>Process AO (P074): production of specialty chemicals using two reactor systems. A reactor system may contain all or some of the following: a reactor, material feed tanks, filters and holding tanks. Volatile organic compound (VOC) emissions from the two reactors, filters and holding tanks are controlled by a flare (F-4 Flare). VOC emissions from the material feed tanks are not controlled.</p> <p>NO₂ emissions will result from the combustion of nitrogen-containing organic compounds at the flare.</p> | OAC rule 3745-31-05(A)(3) | <p>VOC: 3.5 lbs/batch and 1.0 ton/year from all process vent streams controlled by the flare; 17.5 lbs/batch from all process vent streams not controlled by the flare. The requirements of this rule also include the requirements of OAC rule 3745-21-09(LL).</p> <p>NO₂: 25 lbs/batch and 7 tons/year.</p> |
| | OAC rule 3745-21-09(LL) | <p>VOC: 5 tons/rolling 12-month period from all process vent streams not controlled by the flare; see A.I.2.a. and A.I.2.b. below.</p> |
| | OAC rule 3745-23-06(B) | <p>The requirements established pursuant to this rule are equivalent to the requirements of OAC Rule 3745-31-05(A)(3).</p> |

2. Additional Terms and Conditions

- 2.a The VOC emissions from the reactors, filters and holding tanks shall be controlled at all times by a flare. VOC emissions from the material feed tanks are not controlled.
- 2.b Unless exempted by OAC rule 3745-21-09(LL)(3)(b), the flare shall be designed and operated as follows:
 - i. The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.

- ii. The flare shall be operated with either an electric arc ignition system or a pilot flame. If a pilot flame is employed, the flame shall be present at all times and shall be monitored with a thermocouple or any other equivalent device to detect the presence of the pilot flame. If an electric arc ignition system is employed, the arcing shall pulse continually and shall be monitored to detect any failure.
 - iii. The flare shall be steam-assisted, air-assisted or non-assisted.
 - iv. The net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be three hundred Btu/scf or greater if the flare is steam-assisted or air-assisted, or shall be two hundred Btu/scf or greater if the flare is non-assisted.
 - v. Except as provided in paragraph A.I.2.b.vi. of this permit, the flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, of less than sixty feet per second if the flare is steam-assisted or non-assisted, or less than the maximum permitted velocity, as determined in paragraph (P)(4) of rule 3745-21-10 of the Administrative Code, if the flare is air-assisted.
 - vi. Excluded from the requirements of paragraph A.I.2.b.v. of this permit is any steam-assisted or non-assisted flare that meets both of the following requirements:
 - a. The net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be greater than one thousand Btu/scf.
 - b. The flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, less than four hundred feet per second.
- 2.c** Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

II. Operational Restrictions

1. The pilot flame shall be maintained at all times in the flare's pilot light burner;

III. Monitoring and/or Record keeping Requirements

1. The permittee shall develop emission factors for the amount of uncontrolled VOC emitted from the material feed tanks, reactors, filters and holding tanks, for each batch run in this emissions unit, and shall include emissions from flushing. The emission factors shall be in units of pounds

(lbs) of VOC emitted per batch run. The permittee's calculation of each emission factor shall be subject to the review and approval of the Ohio EPA Northeast District Office. If necessary, the permittee shall conduct emission testing, at the request of the Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.

2. The permittee shall keep records of all materials used in this emissions unit for the purpose of determining the emission factors.

3. The permittee shall collect and record the following information for each month:

a. The company identification of each final product generated;

b. The number of batches run for each final product generated;

c. The emission factors used to determine the amount of VOC emitted from the material feed tanks, reactors, filters and holding tanks for each final product generated (in lbs of VOC/batch run);

d. The total VOC emission rate from all process vent streams controlled by the flare, for each of the final products generated, in lbs of VOC/batch run, using the following equation:

$$E \text{ (Controlled)} = (\text{sum of emission factors, in lbs of VOC/each batch}) \times (1 - (\text{CE}/100))$$

Where: CE = control efficiency of the flare;

e. The monthly VOC emission rate from all process vent streams controlled by the flare, for all of the final products generated, in lbs, using the following equation:

$$E \text{ monthly} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (\text{number of batches run})(\text{lbs of VOC/batch run});$$

where

i = each individual final product generated; and

n = the total number of final products generated per month;

f. The ton per year VOC emission rate from all process vent streams controlled by the flare, for all of the final products generated (determined by multiplying A.III.3.e. by 12 months and dividing by 2000 lbs);

g. The total VOC emission rate from all process vent streams not controlled by the flare, for each of the final products generated (in lbs of VOC/batch run);

- h. The monthly VOC emission rate from all process vent streams not controlled by the flare, for all of the final products generated, in lbs, using the following equation:

$E_{\text{monthly}} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of (number of batches run)(lbs of VOC/batch run);}$

where

$i = \text{each individual final product generated; and}$

$n = \text{the total number of final products generated per month; and}$

- i. The rolling, twelve-month summation of the monthly VOC emissions from all process vent streams not controlled by the flare, for all final products generated (in tons, calculated by summing the monthly VOC emissions for the preceding 11 months plus the VOC emissions for the current month).
4. The permittee shall develop emission factors for the amount of NO₂ emitted from the flare for each batch run in this emissions unit. The emission factors shall be in units of pounds of NO₂ emitted per batch run. The permittee's calculation of each emission factor shall be subject to the review and approval of the Ohio EPA Northeast District Office. If necessary, the permittee shall conduct emission testing, at the request of the Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.
5. The permittee shall collect and record the following information for each month:
- a. The company identification of each final product generated;
 - b. The number of batches run for each final product generated;
 - c. The emission factor used to determine the amount of NO₂ emitted from the flare, for each final product generated using nitrogen-containing raw materials (in pounds of NO₂/batch run);
 - d. The monthly NO₂ emission rate from all process vent streams controlled by the flare, for all of the final products generated, in lbs, using the following equation:
 $E_{\text{monthly}} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of (number of batches run)(lbs of NO}_2\text{/batch run);}$
where
 $i = \text{each individual final product generated; and}$
 $n = \text{the total number of final products generated per month; and}$
 - e. The ton per year VOC emission rate from all process vent streams controlled by the flare, for all of the final products generated (determined by multiplying A.III.5.d. by 12 months and dividing by 2000 lbs).

6. The permittee shall properly operate and maintain a device to continuously monitor the pilot flame when the emissions unit 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 the pilot flame was out; and
 - b. The operating times for the flare, monitoring equipment, and the associated emissions unit when in operation and venting gases.
7. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to eliminate the visible emissions.

At any time the permittee observes visible emissions from the flare, the permittee shall monitor the visible emissions for a minimum period of 30 minutes in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and record the results in an operations log.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any exceedances of the pounds per batch, tons per year and tons per rolling, 12-month period emission limitations for VOC.
2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the pounds per batch and tons per year emission limitations for NO₂.
3. The permittee shall submit deviation (excursion) reports that identify all periods during which the flare pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period, as well as the cause of each deviation.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the appropriate Ohio EPA District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit quarterly reports which include all visible emission readings conducted pursuant to the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 as a result of the presence of visible emissions from the flare. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation: 3.5 lbs VOC per batch from all process vent streams controlled by the flare.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required, the emission factors for a final product shall be determined by emissions testing using U.S. EPA reference Methods 25, 25A, or, with prior approval from the Ohio EPA, an alternative U.S. EPA-approved test method.

- b. Emission Limitation: 1.0 ton VOC per year from all process vent streams controlled by the flare.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

- c. Emission Limitation: 17.5 lbs VOC per batch from all process vent streams not controlled by the flare.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions. If required, the emission factors for a final product shall be determined by emissions testing using U.S. EPA reference Methods 25, 25A, or, with prior approval from the Ohio EPA, an alternative U.S. EPA-approved test method.

- d. Emission Limitation: 5 tons of VOC per rolling twelve-month period from all process vent streams not controlled by the flare.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

- e. Emission Limitation: 25 lbs NO₂ per batch.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

- f. Emission Limitation: 7.0 tons NO₂ per year.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping required in Section A.III of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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> |
|---|--------------------------------------|--|
| <p>Process AO (P074): production of specialty chemicals using two reactor systems. A reactor system may contain all or some of the following: a reactor, material feed tanks, filters, filter tanks and holding tanks. Volatile organic compound (VOC) emissions from the two reactors and holding tanks are controlled by a flare (F-4 Flare). VOC emissions from the material feed tanks are not controlled.</p> <p>NO₂ emissions will result from the combustion of nitrogen-containing organic compounds at the flare.</p> | None | None |

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

NEW SOURCE REVIEW FORM B

PTI Number: 02-17449

Facility ID: 0243000024

FACILITY NAME The Lubrizol CorporationFACILITY DESCRIPTION Reactor process AO CITY/TWP PainesvilleSIC CODE 2869 SCC CODE 3-01-999-99 EMISSIONS UNIT ID P074EMISSIONS UNIT DESCRIPTION Process AO: production of specialty chemicals using two reactor systems.DATE INSTALLED 3/2003

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 | 4.9 lbs/batch | 1.43 tons/year | 21 lbs/batch | 6 tons/year |
| Nitrogen Oxides | attainment | 23.2 lbs/batch | 6.6 tons/year | 25 lbs/batch | 7.0 tons/year |
| 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:** VOC: 3.5 lbs/batch and 1.0 ton/year from all process vent streams controlled by the flare; 17.5 lbs/batch from all process bent streams not controlled by the flare. The requirements of this rule also include the requirements of OAC rule 3745-21-09(LL).NO₂: 25 lbs/batch and 7 tons/year.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 NOIDENTIFY THE AIR CONTAMINANTS: Methanol