



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: 02-09105**

CERTIFIED MAIL

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

DATE: 11/16/2000

The Lubrizol Corporation
Angelo B. Cicconetti
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 Director's 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,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

NEDO

Lake County Local Air Agency



**Permit To Install
Terms and Conditions**

**Issue Date: November 16, 2000
Effective Date: November 16, 2000**

FINAL PERMIT TO INSTALL 02-09105

Application Number: 02-09105

APS Premise Number: 0243000024

Permit Fee: **\$4800**

Name of Facility: The Lubrizol Corporation

Person to Contact: Angelo B. Cicconetti

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):

12 Loading racks for loading various lubricant additives into tank cars and tank trucks.

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 Recordkeeping 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 recordkeeping 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 recordkeeping 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.11 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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 thirty (30) days after commencing operation of the source(s) covered by this permit.

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 Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 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 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

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. 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.

5. 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.

6. 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 are inadequate 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 prove to be inadequate or cannot meet applicable standards.

7. 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.

8. 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).

9. 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.

10. 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.

11. 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>
<u>VOC</u>	<u>39.95</u>
<u>HCl</u>	<u>5.9</u>

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>
P038 - Loading rack A/B 8, for the loading of lubricant additives to tank cars.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.d. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 23.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 5.3 tons per year from emissions unit P038.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) at this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive materials that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions unit P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049, according to the following equation:

$$\text{MVOC} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (\text{MTL}/1000)(1-C)(L_i)(\text{ton}/2000 \text{ lbs}); \text{ where}$$

i= each individual type of liquid loaded;

n= the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emission units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid; and
 - d. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
2. The permittee shall also submit annual reports which summarizes the following information for emission units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a. Emission Limitation:
23.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$\text{HR VOC} = (\text{HRTL}/1000)(1-C)(L_L)$$

HRTL= maximum throughput of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
5.3 tons of VOC emissions per year from P038

Applicable Compliance Method:

Compliance with the emissions limit (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (46,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb}/1000 \text{ gal loaded}) * (\text{ton}/2000 \text{ lbs})$$

where:

46,000 is the maximum gallons of liquid loaded per day at this loading rack;

0.626 lb/1000 gal loaded is the loading loss of the worst case liquid loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= 1.45, saturation factor for splash filling from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

The Lubrizol Corporation
PTI Application: 02-09105
Issued: November 16, 2000

Facility ID: 0243000024
Emissions Unit ID: P038

- 1.c. Emissions Limitation:
39.95 tons of VOC emissions per rolling, 12-month period from emission units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P038 - Loading rack A/B 8, for the loading of lubricant additives to tank cars.	None.	None.

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P039 - Loading rack A 11, for the loading of lubricant additive to tank cars.	OAC Rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.d. below.
	OAC Rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 12.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 2.7 tons per year from emissions unit P039.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) at this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;

lubricant additives 15 million gallons; and
waste and recovered materials 5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols 1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives 2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives 0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material 1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive materials that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded at emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049 according to the following equation:

MVOC = the sum, from $i=1$ to $i=n$, of $(MTL/1000)(1-C)(L_L)(\text{ton}/2000 \text{ lbs})$; where

i = each individual type of liquid loaded;

n = the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in $\text{lb}/10^3$ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid; and
 - d. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
2. The permittee shall also submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a. Emissions Limitation:
12.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$\text{HR VOC} = (\text{HRTL}/1000)(1-C)(L_L)$$

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

1.b. Emissions Limitation:

2.7 tons of VOC emissions per year from P039

Applicable Compliance Method:

Compliance with the emissions limit (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (23,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb}/1000 \text{ gal loaded}) * (\text{ton}/2000 \text{ lbs})$$

where:

23,000 is the maximum gallons of liquid loaded per day at this loading rack;

0.626 lb/1000 gal loaded is the loading loss of the worst case liquid loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= 1.45, saturation factor for splash filling from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

1.c. Emissions limitation:

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

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Facility ID: 0243000024
Emissions Unit ID: P039

Compliance with this emissions limit shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P039 - Loading rack A 11, for the loading of lubricant additive to tank cars.	None.	None.

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P040 - Loading rack C/D 8-9-10, for the loading of lubricant additive, anglamol and gasoline additive to tank cars, controlled by a carbon absorber.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.e. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 170.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions unit P040 and 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.
- 2.d All loading of anglamols shall be accomplished in such a manner that displaced vapors and gases shall be vented to a carbon adsorption system. The carbon adsorption system shall be operated with sufficient volumetric flow at the point(s) of capture to minimize or eliminate odor emissions. Upon detection of any break through of odors from the carbon adsorption system, the permittee shall immediately recharge/replace the system with fresh carbon.
- 2.e All loading of gasoline additives shall be accomplished either through a submerged fill loading line or shall be bottom loaded.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) in this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded in this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.

3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded at emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049, according to the following equation:

$MVOC = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (L_L)(MTL / 1000)(1-C)(\text{ton}/2000 \text{ lbs}), \text{ where}$

i = each individual type of liquid loaded;

n = the total number of types of liquid loaded;

MTL = throughput of each type of liquid, in gal/month;

C = overall control efficiency of the emissions control system; and

L_L = the loading loss, in $\text{lb}/10^3$ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S = saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P = true vapor pressure of the liquid, in psia;

M = molecular weight of vapors, in lb/lb-mol; and

T = bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. The permittee shall record daily any time period that displaced vapors and gases were not vented to the carbon adsorption system while loading anglamols.
6. The permittee shall record daily any time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid;

- d. an identification of each time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point;
 - e. an identification of any time period that anglamols were loaded and the carbon adsorption system was not used to control the emissions; and
 - f. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
2. The permittee shall also submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
- a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
- 1.a. Emission Limitation:
170.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$HR\ VOC = (HRTL/1000)(1-C)(L_L)$$

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

$$L_L = (12.46\ SPM / T)$$

where:

S= saturation factor for splash fill from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

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Facility ID: 0243000024
Emissions Unit ID: P040

1.b. Emissions Limitation:

39.95 tons of VOC emissions per rolling, 12-month period from emissions unit P040, and 39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P040 - Loading rack C/D 8-9-10, for the loading of lubricant additive, anglamol and gasoline additive to tank cars, controlled by a carbon absorber.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P041 - Loading rack C/D 11, bays C11, D11, for the loading of lubricant additives, anglamol and gasoline additives to tank cars, tank trucks and iso containers, controlled by a carbon absorber.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I.2.f. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 90.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 21.0 tons per year from emissions unit P041.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.
- 2.e All loading of anglamols shall be accomplished in such a manner that displaced vapors and gases shall be vented to a carbon adsorption system. The carbon adsorption system shall be operated with sufficient volumetric flow at the point(s) of capture to minimize or eliminate odor emissions. Upon detection of any break through of odors from the carbon adsorption system, the permittee shall expediently recharge/replace the system with fresh carbon.

- 2.f** All loading of gasoline additives shall be accomplished either through a submerged fill loading line or shall be bottom loaded.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) in this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded in this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.

3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049 according to the following equation:

$MVOC = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (MTL/1000)(1-C)(L_L)(\text{ton}/2000 \text{ lbs}); \text{ where}$

i = each individual type of liquid loaded;

n = the total number of types of liquid loaded;

MTL = throughput of each type of liquid, in gal/month;

C = overall control efficiency of the emissions control system; and

L_L = the loading loss, in $\text{lb}/10^3$ gal of liquid loaded, and is calculated according to the following equation:

$L_L = (12.46 \text{ SPM} / T) \text{ where:}$

S = saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P = true vapor pressure of the liquid, in psia;

M = molecular weight of vapors, in lb/lb-mol; and

T = bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. The permittee shall record daily any time period that displaced vapors and gases were not vented to the carbon adsorption system while loading anglamols.
6. The permittee shall record daily any time period that loading of gasoline additives was accomplished either through a submerged fill loading line or a bottom loading point.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid.
 - d. an identification of each time that displaced vapors and gases were not vented to the carbon adsorption system while loading anglamols;

- e. an identification of each time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point; and
 - f. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
2. The permittee shall also submit annual reports which summarizes the following information for P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
- a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a. Emissions Limitation:
90.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$HR\ VOC = (HRTL/1000)(1-C)(L_L)$$

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

$$L_L = (12.46\ SPM / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
21.0 tons of VOC emissions per year from P041

Applicable Compliance Method:

Compliance with the emissions limit (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = [(23,000 \text{ gal/d}) * (365 \text{ d/yr}) * (2.63 \text{ lb/1000 gal loaded}) * (\text{ton}/2000 \text{ lbs})] + [(23,000 \text{ gal/d}) * (365 \text{ d/yr}) * (2.36 \text{ lb/1000 gal loaded}) * (\text{ton}/2000 \text{ lbs})]$$

where:

23,000 is the maximum gallons of liquid loaded per day at each bay in this loading rack;
2.63 lbs/1000 gal loaded is the loading loss of the worst case liquid loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= 0.5, saturation factor for submerged fill from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 3.62, true vapor pressure of the liquid, in psia;

M= 74, molecular weight of vapors, in lb/lb-mol;

T= 635°, bulk temperature of liquid loaded, in degrees Rankin;

and:

2.36 lbs/1000 gal loaded is the loading loss of the second worst case liquid loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= 0.5, saturation factor for submerged fill from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 2.24, true vapor pressure of the liquid, in psia;

M= 120, molecular weight of vapors, in lb/lb-mol; and

T= 710°, bulk temperature of liquid loaded, in degrees Rankin.

1.c. Emissions limitation:

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P041 - Loading rack C/D 11, bays C11, D11, for the loading of lubricant additives, anglamol and gasoline additives to tank cars, tank trucks and iso containers, controlled by a carbon absorber.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P042 - Loading rack C/D 12, bays C12 and D12, for the loading of recovered materials, waste materials and lubricant additives to tank cars. Bay C12 is controlled by a fume incinerator.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.e. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 47.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 8.3 tons per year from emissions unit P042.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.
- 2.e Loading of sodium hydro sulfide (a recovered material) at bay C12 of loading rack C/D 12 shall be accomplished in such a manner that all displaced vapors and gases shall be vented to a caustic scrubber which discharges to fume incinerator AC-6 or AC-7.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) in this loading rack during any one day.

2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded in this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded at emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049 according to the following equation:

$$\text{MVOC} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (\text{MTL} / 1000)(1-C)(L_i) \text{ (ton/ 2000 lbs); where}$$

i = each individual type of liquid loaded;

n= the total number of types of liquid loaded;
MTL= throughput of each type of liquid, in gal/month;
C= overall control efficiency of the emissions control system; and
 L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. Fume incinerator AC-6 and AC-7 shall be operated and maintained in accordance with the design specifications, including:
 - a. monitoring and recording the temperature and percent oxygen in AC-6 incinerator continuously; and
 - b. continuously monitoring the temperature in AC-7 incinerator.
6. The permittee shall record daily any time period that all displaced vapors and gases were not vented to the caustic scrubber and then to fume incinerator AC-6 or AC-7 while loading of sodium hydro sulfide.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid;
 - d. an identification of each time period that all displaced vapors and gases were not vented to the caustic scrubber and then to fume incinerator AC-6 or AC-7 while loading of sodium hydro sulfide; and

- e. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
- 2. The permittee shall also submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

- 1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a. Emissions Limitation:
47.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$\text{HR VOC} = (\text{HRTL}/1000)(1-C)(L_L)$$

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
8.3 tons of VOC emissions per year from emissions unit P042

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limit (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (23,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb/1000 gal loaded}) * (\text{ton}/2000 \text{ lbs}) + (20,000 \text{ gal/d}) * (365 \text{ d/yr}) * (1.29 \text{ lbs/1000 gal loaded}) * (\text{ton}/2000 \text{ lbs})$$

where:

23,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and 0.626 lb/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and 1.29 lbs/1000 gal loaded is the loading loss of the worst case waste material loaded and are calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T)$$

where:

for lubricant additive:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

for waste material:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.358, true vapor pressure of the liquid, in psia;

M= 106, molecular weight of vapors, in lb/lb-mol; and

T= 530°, bulk temperature of liquid loaded, in degrees Rankin.

1.c. **Emissions limitation:**

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P042 - Loading rack C/D 12, bays C12 and D12, for the loading of recovered materials, waste materials and lubricant additives to tank cars. Bay C12 is controlled by a fume incinerator.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P043 - Loading rack C/D 15, bays C15 and D15, for the loading of lubricant additives to tank cars, controlled by a flare.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.g. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 23.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 5.3 tons per year from emissions unit P043.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.
- 2.e Hydrogen chloride (HCl) emissions shall not exceed 8.30 pounds per hour.
- 2.f HCl emission shall not exceed 5.0 tons per year from emissions unit P043.
- 2.g All loading of the lubricant additive currently stored in storage tank 801 (emissions unit T048) in loading rack D 15 (emissions unit P043) shall be accomplished in such a manner that all displaced vapors and gases shall be vented to a water scrubber which discharges to elevated flare AE-7. This flare is used as a control device for existing emissions unit P032. If, at any time, the material currently stored in storage tank 801 is moved to a different

storage tank, the emission control system described above must continue to be used while loading from the new storage tank.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) in this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

4. The flare shall be operated and maintained in accordance with design specifications, including:
 - a. operate the flare in a smokeless condition;
 - b. monitoring the pilot light continuously for flame out; and
 - c. maintaining a manual re-ignition system for the pilot light.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive materials that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;

- e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049 according to the following equation:

MVOC = the sum, from $i=1$ to $i=n$, of $(MTL/1000)(1-C)(L_L)(\text{ton}/2000 \text{ lbs})$; where

i = each individual type of liquid loaded;

n = the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in $\text{lb}/10^3$ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. The permittee shall collect and record each month the following information for emissions units P043:
- a. the throughput of each type of liquid containing HCl, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of fume destruction used for each type of liquid loaded and the estimated overall control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol; and

- f. the bulk temperature of liquid loaded, in degrees Rankin.
6. The permittee shall record every month the HCl emissions (MHCl) from each liquid loaded in emissions unit P043, according to the following equation:

$MHCl = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (MTL/1000)(1-C)(L_L); \text{ where}$

$i =$ each individual type of liquid loaded;

$n =$ the total number of types of liquid loaded;

$MTL =$ throughput of each type of liquid, in gal/month;

$C =$ overall control efficiency of the emissions control system; and

$L_L =$ the loading loss, in $lb/10^3$ gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

$S =$ saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

$P =$ true vapor pressure of the liquid, in psia;

$M =$ molecular weight of vapors, in lb/lb-mol; and

$T =$ bulk temperature of liquid loaded, in degrees Rankin.

7. The permittee shall record daily any time period that displaced vapors and gases were not vented to the water scrubber and then to the elevated flare AE-7 while loading lubricant additive from tank 801 (emission unit T048).

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
- an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for VOC;
 - all exceedances of the rolling, 12-month throughput limits for each type of liquid;
 - an identification of each time period that displaced vapors and gases were not vented to the water scrubber and then to the elevated flare AE-7 while loading lubricant additive from tank 801 (emission unit T048); and
 - any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.

2. The permittee shall submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.
3. The permittee shall also submit annual reports which summarizes the following information for P043:
 - a. the annual throughput of each type of liquid containing HCl, in gallons per year; and
 - b. the HCl emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a. Emissions Limitation:
23.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$HR\ VOC = (HRTL/1000)(1-C)(L_L)$$

HRTL= throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46\ SPM / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
5.3 tons of VOC emissions per year from P043

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (46,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb/1000 gal loaded}) * (\text{ton}/2000 \text{ lbs})$$

where:

46,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and 0.626 lb/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \quad \text{where:}$$

for lubricant additive:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

1.c. Emissions Limitation:

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly value calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

1.d. Emissions Limitation:

8.30 pounds of HCl emissions per hour

Applicable Compliance Method:

Compliance with the hourly HCl emissions limit (HRHCl) shall be determined by the following equation:

$$\text{HR HCl} = (\text{HRTL}/1000)(1-C)(L_L)$$

HRTL= throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.e. Emissions Limitation:
5.0 tons of HCl emissions per year from emissions unit P043

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by the sum of the monthly emission rate as recorded according to A.III.5 and A.III.6 for the calendar year.

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>
P043 - Loading rack C/D 15, bays C15 and D15, for the loading of lubricant additives to tank cars, controlled by a flare.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P044 - Loading rack at the 200 Tank Farm West for the loading of lubricant additives to tank trucks and iso containers.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.d. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 12.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 6.9 tons per year from emissions unit P044.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) in this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols

15 million gallons;

gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049 according to the following equation:

$$MVOC = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (MTL / 1000)(1-C)(L_L)(\text{ton}/2000 \text{ lbs}); \text{ where}$$

i= each individual type of liquid loaded;

n= the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid; and
 - d. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
2. The permittee shall also submit annual reports which summarizes the following information for P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a. Emissions Limitation:
12.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$\text{HR VOC} = (\text{HRTL} / 1000)(1 - C)(L_L)$$

HRTL = maximum throughput of each type of liquid, in gal/hr;

C = overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S = saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P = true vapor pressure of the liquid, in psia;

M = molecular weight of vapors, in lb/lb-mol; and

T = bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
6.9 tons of VOC emissions per year from P044

Applicable Compliance Method:

Compliance with the emissions limitation (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (60,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb/1000 gal loaded}) * (\text{ton}/2000 \text{ lbs})$$

where:

60,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and 0.626 lb/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and are calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

for lubricant additive:

S = 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P = 0.16, true vapor pressure of the liquid, in psia;

M = 130, molecular weight of vapors, in lb/lb-mol; and

T = 600°, bulk temperature of liquid loaded, in degrees Rankin.

- 1.c. Emissions limitation:

The Lubrizol Corporation
PTI Application: 02-09105
Issued: November 16, 2000

Facility ID: 0243000024
Emissions Unit ID: P044

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly emission rate calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P044 - Loading rack at the 200 Tank Farm West for the loading of lubricant additives to tank trucks and iso containers.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P045 - Loading rack at the 500 Tank Farm East, for the loading of lubricant additives to tank trucks and iso containers, controlled by a fume incinerator.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.e. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 22.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 13.0 tons per year from emissions unit P045.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.
- 2.e There are two (2) loading arms at this loading rack.

One loading arm is only used for loading of the lubricant additives currently stored in storage tanks 573, 594, 595, 596, 597, 598 and 599, (emissions units T201, T206, T207, T171, T208-210). Loading with this arm shall be accomplished in such manner that all displaced vapors and gases shall be vented to a caustic scrubber (Z-13) which discharges to the atmosphere. If at any time the material currently stored in storage tanks 573, 594, 595, 596, 597, 598, or 599 is moved to a different storage tank, the emission control system described above must continue to be used while loading from the new storage tank.

The other loading arm is for the loading of lubricant additives currently stored in storage tanks 555, 557, 558, 574, 577, 618, and 639 (emissions units T129, T199, T200, T202, T203, T058 and T071) which are loaded with a standard splash fill loading arm and vented to the atmosphere.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) in this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and

- g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049 according to the following equation:

MVOC = the sum, from $i=1$ to $i=n$, of $(MTL / 1000)(1-C)(L_L)$ (ton/2000 lbs); where

i = each individual type of liquid loaded;

n = the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C = overall control efficiency of the emissions control system; and

L_L = the loading loss, in $lb/10^3$ gal of liquid loaded, and is calculated according to the following equation:

$L_L = (12.46 \text{ SPM} / T)$ where:

S = saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P = true vapor pressure of the liquid, in psia;

M = molecular weight of vapors, in lb/lb-mol; and

T = bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. The permittee shall record daily any time period that displaced vapors and gases were not vented to the caustic scrubber (Z-13) while loading material from storage tanks 573, 594, 595, 596, 597, 598, and 599 (emissions units T201, T206, T207, T171, T208-210).

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
- an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 for VOC;
 - all exceedances of the rolling, 12-month throughput limits for each type of liquid;
 - an identification of each time period that displaced vapors and gases were not vented to the caustic scrubber (Z-13) while loading material from storage tanks 573, 594, 595, 596, 597, 598, and 599 (emissions units T201, T206, T207, T171, T208-210); and

- e. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
- 2. The permittee shall also submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

- 1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a. Emissions Limitation:
22.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$HR\ VOC = (HRTL/1000)(1-C)(L_L)$$

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46\ SPM / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
13.0 tons of VOC emissions per year from P045

Applicable Compliance Method:

Compliance with the emissions limitation (YR VOC) shall be determined by the following equation:

$$YR\ VOC = (60,000\ gal/d) * (365\ d/yr) * (1.18\ lbs/1000\ gal\ loaded) * (tons/2000\ lbs)$$

where:

60,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and 1.18 lbs/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T)$$

where:

for lubricant additive:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.61, true vapor pressure of the liquid, in psia;

M= 60, molecular weight of vapors, in lb/lb-mol; and

T= 560°, bulk temperature of liquid loaded, in degrees Rankin.

- 1.c. Emissions Limitation:
39.95 tons of VOC emissions per rolling, 12-month period from P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P045 - Loading rack at the 500 Tank Farm East, for the loading of lubricant additives to tank trucks and iso containers, controlled by a fume incinerator.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P046 - Loading rack at 700 Tank Farm East, for the loading of lubricant additives to tank trucks and iso containers.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.d. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 12.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 6.9 tons year from emissions unit P046.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) in this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols

15 million gallons;

gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049, according to the following equation:

$$MVOC = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (MTL / 1000)(1-C)(L_L)(\text{ton}/2000 \text{ lbs}); \text{ where}$$

i= each individual type of liquid loaded;

n= the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. The permittee shall record daily any time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid; and
 - d. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
2. The permittee shall also submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a. Emissions Limitation:
11.3 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limitation (HRVOC) shall be determined by the following equation:

$$\text{HR VOC} = (\text{HRTL}/1000)(1-C)(L_L)$$

where:

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

1.b. Emissions Limitation:

6.9 tons of VOC emissions per year from emissions unit P046

Applicable Compliance Method:

Compliance with the emissions limitation (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (60,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb}/1000 \text{ gal loaded}) * (\text{ton}/2000 \text{ lbs})$$

where:

60,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and
0.626 lb/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

- 1.c. Emissions Limitation:
39.95 tons of VOC emissions per rolling, 12-month period from P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limitation shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P046 - Loading rack at 700 Tank Farm East, for the loading of lubricant additives to tank trucks and iso containers.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P047 - Loading rack at the 700 Tank Farm North, for the loading of recovered material to tank trucks and iso containers, controlled by a wet scrubber.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.g. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Hydrochloric acid (HCl) emissions shall not exceed 1.40 pounds per hour.
- 2.c HCl emissions shall not exceed 0.9 ton per year.
- 2.d All loading of hydrochloric acid (a recovered material) at this emissions unit shall be accomplished in such a manner that all displaced vapors and gases shall be vented to a water scrubber as a means to control hydrogen chloride vapors.
- 2.e Volatile Organic Compound (VOC) emissions shall not exceed 12.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.f VOC emissions shall not exceed 6.9 tons per year from emissions unit P047.
- 2.g VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC rule 3745-21-01) in this loading rack during any one day.
2. The pH of the scrubber liquor shall be maintained above 7.5.
3. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly through puts:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

4. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.

3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P048 and P049, according to the following equation:

$$\text{MVOC} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (\text{MTL} / 1000)(1-C)(L_L)(\text{ton}/2000 \text{ lbs})$$

where:

i= each individual type of liquid loaded;

n= the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. The permittee shall collect and record each month the following information for emissions unit P047:
 - a. the throughput of each type of liquid containing HCl, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of fume destruction used for each type of liquid loaded and the estimated overall control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol; and
 - f. the bulk temperature of liquid loaded, in degrees Rankin.

6. The permittee shall record every month the HCl emissions (MHCl) from each liquid loaded at emissions unit P047, according to the following equation:

$$\text{MHCl} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (\text{MTL}/1000)(1-C)(L_L); \text{ where}$$

i= each individual type of liquid loaded;

n= the total number of types of liquid loaded;

MTL= throughput of each type of liquid, in gal/month;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2:

$$L_L = (12.46 \text{ SPM} / T) \text{ where:}$$

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

7. The permittee shall collect and record the following information each day:
- a. a log or record of the pH of the scrubber liquor; and
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid;
 - d. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above; and
 - e. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.

2. The permittee shall submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.
3. The permittee shall also submit annual reports which summarizes the following information for emissions unit P047:
 - a. the annual throughput of each type of liquid containing HCl, in gallons per year; and
 - b. the HCl emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a. Emissions Limitation:
12.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limitation (HRVOC) shall be determined by the following equation:

$$HR\ VOC = (HRTL/1000)(1-C)(L_L)$$

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46\ SPM / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
6.9 tons of VOC emissions per year from emissions unit P047

Applicable Compliance Method:

Compliance with the emissions limitation (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (60,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb/1000 gal loaded}) * (\text{ton}/2000 \text{ lbs})$$

where:

60,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and 0.626 lb/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T) \quad \text{where:}$$

for lubricant additive:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

1.c. Emissions Limitation:

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly value calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

1.d. Emissions Limitation:

1.40 pounds of HCl emissions per hour

Applicable Compliance Method:

Compliance with the hourly HCl emissions limitation (HRHCl) shall be determined by the following equation:

$$\text{HR HCl} = (\text{HRTL}/1000)(1-C)(L_L)$$

where:

HRTL= throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.e. Emissions Limitation:
0.9 ton of HCl emissions per year from emissions unit P047.

Applicable Compliance Method:

Compliance with this emission limit shall be determined by summing the monthly emission rates as recorded according to A.III.5 and A.III.6 for the calendar year.

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>
P047 - Loading rack at the 700 Tank Farm North, for the loading of recovered material to tank trucks and iso containers, controlled by a wet scrubber.	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping 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

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Issued: November 16, 2000

Facility ID: 0243000024
Emissions Unit ID: P047

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.

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>
P048 - Loading rack at 800 Tank Farm South, for the loading of lubricant additives to tank trucks and iso containers,	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.d. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 12.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 6.9 tons per year from emissions unit P048.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) at this loading rack during any one day.
2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded in emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P048 and P049 according to the following equation:

$$MVOC = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (MTL / 1000)(1-C)(L_L)(\text{ton}/2000 \text{ lbs})$$

where:

i= each individual type of liquid loaded;
n= the total number of types of liquid loaded;
MTL= throughput of each type of liquid, in gal/month;
C= overall control efficiency of the emissions control system; and
 L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid; and
 - d. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.
2. The permittee shall also submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a. Emissions Limitation:
12.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limitation (HRVOC) shall be determined by the following equation:

$$HR\ VOC = (HRTL/1000)(1-C)(L_L)$$

where:

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation AP-42, Section 5.2 (1/95):

$$L_L = (12.46\ SPM / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

1.b. Emissions Limitation:
6.9 tons of VOC emissions per year from emissions unit P048

Applicable Compliance Method:

Compliance with the emissions limitation (YR VOC) shall be determined by the following equation:

$$YR\ VOC = (60,000\ gal/d) * (365\ d/yr) * (0.626\ lb/1000\ gal\ loaded) * (ton/2000\ lbs)$$

where:

60,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and 0.626 lb/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46\ SPM / T) \quad \text{where:}$$

for lubricant additive:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

1.c. Emissions Limitation:

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limitation shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P048 - Loading rack at 800 Tank Farm South, for the loading of lubricant additives to tank trucks and iso containers,	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

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>
P049 - Loading rack at Gen III, for the loading of lubricant additives and gasoline additives to tank trucks and iso containers.	OAC rule 3745-31-05(A)(3)	See A.I.2.a. through A.I. 2.e. below.
	OAC rule 3745-21-07(E)	See A.II.1. below.

2. Additional Terms and Conditions

- 2.a The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.
- 2.b Volatile Organic Compound (VOC) emissions shall not exceed 12.0 pounds per hour. The short term emission limitation for VOC established in A.I.1 above was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.c VOC emissions shall not exceed 6.9 tons per year from emissions unit P049.
- 2.d VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.
- 2.e All loading of gasoline additives shall be accomplished either through a submerged fill loading line or shall be bottom loaded.

II. Operational Restrictions

1. The permittee shall not load more than 40,000 gallons of any volatile photochemically reactive material (as defined in OAC Rule 3745-21-01) at this loading rack during any one day.

2. The maximum annual throughput in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined shall not exceed the following, based on a rolling, 12-month summation of monthly throughputs:

anglamols	15 million gallons;
gasoline additives	15 million gallons;
lubricant additives	15 million gallons; and
waste and recovered materials	5 million gallons.

3. The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 shall not exceed:

anglamols	1.01 lbs VOC/ 1000 gallons loaded;
gasoline additives	2.63 lbs VOC/ 1000 gallons loaded;
lubricant additives	0.626 lbs VOC/ 1000 gallons loaded; and
waste and recovered material	1.29 lbs VOC/1000 gallons loaded.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record daily the amount, in gallons, of any volatile photochemically reactive material that are loaded at this rack.
2. The permittee shall collect and record each month the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 collectively:
 - a. the throughput of each type of liquid containing VOC, in gallons;
 - b. the loading method for each type of liquid loaded;
 - c. the method of VOC destruction used for each type of liquid loaded and the estimated overall VOC control efficiency, in percent;
 - d. the true vapor pressure of the liquid, in psia;
 - e. the molecular weight of vapors, in lb/lb-mol;
 - f. the bulk temperature of liquid loaded, in degrees Rankin; and
 - g. the throughput of each type of liquid for the previous 12-month period, in gallons.
3. The permittee shall record every month the sum of VOC emissions (MVOC) from each liquid loaded at emissions units P038, P039, P040, P041, P041, P042, P043, P044, P045, P046, P047, P048 and P049 according to the following equation:

$$\text{MVOC} = \text{the sum, from } i=1 \text{ to } i=n, \text{ of } (\text{MTL} / 1000)(1-C)(L_i)(\text{ton}/2000 \text{ lbs})$$

where:

i= each individual type of liquid loaded;
n= the total number of types of liquid loaded;
MTL= throughput of each type of liquid, in gal/month;
C= overall control efficiency of the emissions control system; and
 L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;
P= true vapor pressure of the liquid, in psia;
M= molecular weight of vapors, in lb/lb-mol; and
T= bulk temperature of liquid loaded, in degrees Rankin.

4. The permittee shall record every month the rolling, 12-month summation of the VOC emissions from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined for the previous, 12-month period, in tons.
5. The permittee shall record daily any time period that loading of gasoline additives was accomplished in a manner other than either through a submerged fill loading line or a bottom loading point.

IV. Reporting Requirements

1. In accordance with Section 2.b. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports which includes:
 - a. an identification of each day during which the daily volatile photochemically reactive material loaded exceeded 40,000 gallons and the actual gallons loaded during each such day;
 - b. all exceedances of the rolling, 12-month emissions limitation for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P037, P048 and P049 for VOC;
 - c. all exceedances of the rolling, 12-month throughput limits for each type of liquid;
 - d. any time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point;
 - e. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above; and
 - f. any monthly record showing that the loading loss for any liquid exceeded the maximum loading losses specified in A.II.3.

2. The permittee shall also submit annual reports which summarizes the following information for emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049:
 - a. the annual throughput of each type of liquid, in gallons per year; and
 - b. the VOC emissions, in tons per year.

V. Testing Requirements

1. Compliance with the allowable emissions limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a. Emissions Limitation:
12.0 pounds of VOC emissions per hour

Applicable Compliance Method:

Compliance with the hourly VOC emissions limit (HRVOC) shall be determined by the following equation:

$$HR\ VOC = (HRTL/1000)(1-C)(L_L)$$

where:

HRTL= maximum throughput of each type of liquid, in gal/hr;

C= overall control efficiency of the emissions control system; and

L_L = the loading loss, in lb/10³ gal of liquid loaded, and is calculated according to the following equation:

$$L_L = (12.46\ SPM / T)$$

where:

S= saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= true vapor pressure of the liquid, in psia;

M= molecular weight of vapors, in lb/lb-mol; and

T= bulk temperature of liquid loaded, in degrees Rankin.

- 1.b. Emissions Limitation:
6.9 tons of VOC emissions per year from P049

Applicable Compliance Method:

Compliance with the emissions limitation (YR VOC) shall be determined by the following equation:

$$\text{YR VOC} = (60,000 \text{ gal/d}) * (365 \text{ d/yr}) * (0.626 \text{ lb/1000 gal loaded}) * (\text{tons}/2000 \text{ lbs})$$

where:

60,000 is the maximum gallons of liquid loaded per day at each bay of this loading rack; and 0.626 lb/1000 gal loaded is the loading loss of the worst case lubricant additive loaded and is calculated according to the following equation From AP-42, Section 5.2 (1/95):

$$L_L = (12.46 \text{ SPM} / T)$$

where:

S= 1.45, splash fill saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses;

P= 0.16, true vapor pressure of the liquid, in psia;

M= 130, molecular weight of vapors, in lb/lb-mol; and

T= 600°, bulk temperature of liquid loaded, in degrees Rankin.

1.c. Emissions Limitation:

39.95 tons of VOC emissions per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048 and P049 combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be determined by monthly emission rates calculated in A.III.4. based on the record keeping specified in A.III.2 and A.III.3.

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>
P049 - Loading rack at Gen III, for the loading of lubricant additives and gasoline additives to tank trucks and iso containers.	None.	None.

2. **Additional Terms and Conditions**

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping 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

The Lubrizol Corporation
PTI Application: 02-09105
Issued: November 16, 2000

Facility ID: 0243000024
Emissions Unit ID: P049

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: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P038

EMISSIONS UNIT DESCRIPTION Loading rack A/B 8, for the loading of lubricant additives to tank cars.

DATE INSTALLED 1/82

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	22.5 lbs/hr	0.346 tpy	23.0 lbs/hr	5.3 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P039

EMISSIONS UNIT DESCRIPTION Loading rack A 11, for the loading of lubricant additive to tank cars.

DATE INSTALLED 1/82

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	11.3 lbs/hr	0.173 tpy	12.0 lbs/hr	2.7 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P040

EMISSIONS UNIT DESCRIPTION Loading rack C/D 8-9-10, for the loading of lubricant additive, anglamol and gasoline additive to tank cars, controlled by a carbon absorber.

DATE INSTALLED 1/80

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	132.9 lbs/hr	2.13 tpy	170.0 lbs/hr	39.95 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P041

EMISSIONS UNIT DESCRIPTION Loading rack C/D 11, bays C11, D11, for the loading of lubricant additives, anglamol and gasoline additives to tank cars, tank trucks and iso containers, controlled by a carbon absorber.

DATE INSTALLED 1/80

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	89.8 lbs/hr	1.17 tpy	90.0 lbs/hr	21.0tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P042

EMISSIONS UNIT DESCRIPTION Loading rack C/D 12, bays C12 and D12, for the loading of recovered materials, waste materials and lubricant additives to tank cars. Bay C12 is controlled by a fume incinerator.

DATE INSTALLED 1/80

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	22.5 lbs/hr	0.245 tpy	47.0 lbs/hr	8.3 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P043

EMISSIONS UNIT DESCRIPTION Loading rack C/D 15, bays C15 and D15, for the loading of lubricant additives to tank cars, controlled by a flare.

DATE INSTALLED 1/80

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	22.5 lbs/hr	0.0473 tpy	23.0 lbs/hr	5.3 tpy
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	HCl	8.28 lbs/hr	0.160 tpy	8.30 lbs/hr	5.0 tpy

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P044

EMISSIONS UNIT DESCRIPTION Loading rack at the 200 Tank Farm West for the loading of lubricant additives to tank trucks and iso containers.

DATE INSTALLED 1/78

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	11.3 lbs/hr	0.185 tpy	12.0 lbs/hr	6.9 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P045

EMISSIONS UNIT DESCRIPTION Loading rack at the 500 Tank Farm East, for the loading of lubricant additives to tank trucks and iso containers, controlled by a fume incinerator.

DATE INSTALLED 1/78

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	0.424 lbs/hr	0.00122 tpy	22.0 lbs/hr	13.0 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P046

EMISSIONS UNIT DESCRIPTION Loading rack at 700 Tank Farm East, for the loading of lubricant additives to tank trucks and iso containers.

DATE INSTALLED 1/80

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	11.27 lbs/hr	0.185 tpy	12.0 lbs/hr	6.9 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P047

EMISSIONS UNIT DESCRIPTION Loading rack at the 700 Tank Farm North, for the loading of recovered material to tank trucks and iso containers, controlled by a wet scrubber.

DATE INSTALLED 1/92

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	11.3 lbs/hr	0.185 tpy	12.0 lbs/hr	6.9 tpy
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	hydrogen chloride	1.39 lbs/hr	0.018 tpy	14.0 lbs/hr	0.9 tpy

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

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 NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P048

EMISSIONS UNIT DESCRIPTION Loading rack at 800 Tank Farm South, for the loading of lubricant additives to tank trucks and iso containers,

DATE INSTALLED 1/82

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	11.3 lbs/hr	0.185 tpy	12.0 lbs/hr	6.9 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

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 NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 02-09105

Facility ID: 0243000024

FACILITY NAME The Lubrizol Corporation

FACILITY DESCRIPTION 12 Loading racks for loading various lubricant additives into tank cars and tank trucks CITY/TWP Painesville

SIC CODE 2869 SCC CODE 4-08-999-99 EMISSIONS UNIT ID P049

EMISSIONS UNIT DESCRIPTION Loading rack at Gen III, for the loading of lubricant additives and gasoline additives to tank trucks and iso containers.

DATE INSTALLED 1/90

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	11.25 lbs/hr	0.220 tpy	12.0 lbs/hr	6.9 tpy
Nitrogen Oxides					
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?

Compliance with the emission limits in this permit; prevent liquid drainage from loading arm when not in use or accomplish complete drainage before arm is disconnected.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

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 NO

IDENTIFY THE AIR CONTAMINANTS: _____