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

02/16/01

CERTIFIED MAIL

RE: Preliminary Proposed Title V
Chapter 3745-77 permit

02-43-15-0025
The Lubrizol Corporation - Wickliffe Facility
Tom Connolly
29400 Lakeland Boulevard
Wickliffe, OH 44092-2298

Dear Tom Connolly:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 03/16/00. The comment period has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written or with agreed-upon changes, then you have the opportunity to schedule a meeting with us to discuss your concerns.

Please contact Jim Orlemann, Engineering Section Manager, 614-644-3592, or you can telefax your request to (614) 644-3681, within fourteen (14) days from receipt of this letter if a meeting is desired. If a request for a meeting is not received within fourteen (14) days of receipt of this letter, we will forward this proposed permit (as written, or with agreed-upon changes) to USEPA for approval.

Very truly yours,

Thomas G. Rigo

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

cc: Northeast District Office
Becky Castle, DAPC PMU

Ohio EPA
State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Date: 02/16/01
Effective Date: **To be entered upon final issuance**
Expiration Date: **To be entered upon final issuance**

This document constitutes issuance to:

The Lubrizol Corporation - Wickliffe Facility
29400 Lakeland Boulevard
Wickliffe, OH 44092-2298

of a Title V permit for Facility ID: 02-43-15-0025

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:
B001 (Keeler Boiler)
Boiler - Gas and Oil Rated 27 MMBTU/hr Keeler Co. Model CP

B002 (Erie City VL Boiler)
Boiler - Gas and Oil Rated: 33 MMBTU/hr Erie City Model VL

B003 (Erie City VC Boiler)
Boiler - Gas and Oil Rated: 55 MMBTU/hr Erie City Model VC

B005 (South Property Water Heater)
South Property Water Heater

B006 (South Property Water Heater)
South Property Water Heater

L003 (Bldg 12 Parts Cleaning)
Parts Cleaning Area (Building 12)

P009 (Engine Test Facility)
Engine Test Facility

P011 (North, South Pilot Plant)
North and South Pilot Plant

P012 (North Pilot Plant Expansion)
North Pilot Plant Expansion

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

_____

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

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 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 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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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 promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
iii. Written reports, which identify any deviations from the federally enforceable <u>monitoring, recordkeeping, and reporting requirements</u> 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i)

and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. 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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than

the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. 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.

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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 paragraph (E) of OAC rule 3745-77-03.
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.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed

therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;

b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18. Insignificant Activity

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. 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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B004 - B 622 hot oil furnace
T001 - Tank H-1; 210,000-gallon aqueous wastewater
T002 - Tank H-2; 258,000-gallon aqueous wastewater
T003 - Tank H-21; 70,500-gallon recovered basic aqueous wastes
T004 - Tank H-22; 70,500-gallon emergency spill containment only
T005 - Tank H-23; 70,500-gallon blend oil
T008 - Tank S-1; 25,000-gallon organics/aqueous material
T009 - Tank S-2; 25,000-gallon basic aqueous material
T010 - Tank S-4; 12,000-gallon basic recovered organic
T011 - Tank S-5; 12,000-gallon stoddard solvent/used oil
T012 - Tank S-6; 5,000-gallon waste gasoline
T013 - Tank S-7; 12,000-gallon waste oil
T014 - Tank CR-1; 150-gallon recovered organics/aqueous material
T175 - Tank H-4; organic material
T176 - Tank H-5; organic material
T177 - Tank H-6; organic material
T178 - Tank H-7; organic material
T179 - Tank H-8; organic material
T180 - Tank H-9; organic material
T181 - Tank H-10; organic material
T182 - Tank H-11; organic material
T183 - Tank H-12; organic material
T184 - Tank H-13; organic material
T185 - Tank H-14; organic material
T186 - Tank H-15A; organic material
T187 - Tank H-15B; organic material
T188 - Tank H-15C; organic material
T189 - Tank H-15D; organic material
T190 - Tank H-16; organic material
T191 - Tank H-17; organic material
T192 - Tank H-18; organic material
T193 - Tank H-19; organic material
T194 - Tank H-20; organic material
T195 - Tank X-1; organic material
T196 - Tank X-2; organic material
T197 - Tank X-3; organic material
T198 - Tank X-4; organic material
T210 - Tank H-3; organic material

B. State Only Enforceable Section (continued)

T229 - Storage tank G-101
T230 - Storage tank G-102
T231 - Storage tank G-103
T232 - Storage tank G-104
T233 - Storage tank G-105
T234 - Storage tank G-106
T235 - Storage tank G-107
T236 - Storage tank G-108
T237 - Storage tank G-109
T238 - Storage tank G-110
T239 - Storage tank G-111
T240 - Storage tank G-112
T241 - Storage tank G-113
T242 - Storage tank G-114
T243 - Storage tank G-115
T244 - Storage tank G-116
T245 - Storage tank G-117
T246 - Storage tank G-118
T247 - Storage tank G-119
T248 - Blend tank BL-101
T249 - Blend tank BL-102
T250 - Blend tank BL-103
T251 - Blend tank BL-104
T252 - Blend tank BL-105
T253 - Blend tank BL-106
T254 - Blend tank BL-107
T255 - Blend tank BL-108
T256 - Blend tank BL-109
T257 - Blend tank BL-110
T258 - Blend tank BL-111
T259 - Blend tank BL-112
Z012 - Plantwide laboratory equipment and laboratory fume hoods
Z013 - South property boiler
Z014 - South property boiler
Z017 - Storage tank T-12001A
Z018 - Storage tank T-12001B
Z019 - Storage tank T-12001C
Z020 - Storage tank T-12002A
Z021 - Storage tank T-12002B
Z022 - Storage tank T-12002C
Z024 - Storage tank T-12003A
Z025 - Storage tank T-12003B
Z026 - Storage tank T-12003C
Z029 - Storage tank T-1800

B. State Only Enforceable Section (continued)

Z030 - Blend tank 1 (south property)
Z031 - Blend tank 2 (south property)
Z032 - Building 10 pilot plant cold cleaner
Z033 - Building 11 glassware cold cleaner
Z034 - Building 15 rebuild area cold cleaner
Z035 - Plantwide small parts cleaners
Z038 - Building 14 diesel rebuild area cold cleaners
Z042 - Gasoline loading of storage tanks from delivery vessels
Z044 - Diesel fuel loading of storage tanks from delivery vessels
Z045 - Stoddard solvent loading of storage tanks from delivery vessels
Z046 - Gasoline dispensing
Z047 - Diesel fuel dispensing
Z048 - Can/drum filling
Z049 - Corporate building backup generator
Z050 - South research building backup generator
Z051 - SPP fume incinerator backup generator
Z052 - Mechanical testing lab backup generator
Z053 - Old main vault east pad generator
Z054 - Boiler room backup generator
Z055 - Old main vault west pad generator
Z056 - Building 28 backup generator
Z057 - Main guardhouse generator
Z058 - Radio building generator
Z059 - Security building backup generator
Z060 - Fire pumphouse generator
Z061 - PBX phone room generator
Z066 - Building 22C paint booth
Z067 - Building 40 paint booth
Z068 - Valves, pumps, connectors (fugitive equipment)
Z069 - Paved roadway
Z152 - Building 8 blend/stock services

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Keeler Boiler (B001)

Activity Description: Boiler - Gas and Oil Rated 27 MMBTU/hr Keeler Co. Model CP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Keeler, 27 mmBtu/hr, natural gas and no. 2 fuel oil-fired boiler	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

2. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

a. A sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds of sulfur dioxide/mmBtu actual heat input.

b. A heat content that is greater than or equal to 136,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate in lb/mmBtu.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternatively, equivalent methods may be used upon written approval by the Ohio EPA Northeast District Office.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

a. The total quantity of oil received in each shipment (gallons);

b. The weighted* average sulfur dioxide emissions rate (lb/mmBtu) for the oil received during each calendar month; and

c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

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

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.c Emission Limitation:

1.6 pounds of sulfur dioxide emissions per million Btu input.

Applicable Compliance Method:

To determine the actual emission rate for SO2, the following equation shall be used:

E (lb/mmBtu) = [(1 x 10^6) / H] x D x S x 1.974

Where:

E = SO2 emission rate, in lb/mmBtu;

H = heat content of the liquid fuel, in Btu/gal;

D = density of the liquid fuel, in lb/gal; and

S = decimal fraction of sulfur in the liquid fuel.

2. If required, the permittee shall conduct, or have conducted, SO2 emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 1.6 lbs/mmBtu actual heat input in accordance with the following requirements:

Compliance with the allowable mass emission rate for SO2 shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 and the procedures in OAC rule 3745-18-04.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Keeler, 27 mmBtu/hr, natural gas and no. 2 fuel oil-fired boiler	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Erie City VL Boiler (B002)

Activity Description: Boiler - Gas and Oil Rated: 33 MMBTU/hr Erie City Model VL

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Erie City Model VL, 33 mmBtu/hr, natural gas and no. 2 fuel oil-fired boiler	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

2. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

a. A sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds of sulfur dioxide/mmBtu actual heat input.

b. A heat content that is greater than or equal to 136,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate in lb/mmBtu.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternatively, equivalent methods may be used upon written approval by the Ohio EPA Northeast District Office.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

a. The total quantity of oil received in each shipment (gallons);

b. The weighted* average sulfur dioxide emissions rate (lb/mmBtu) for the oil received during each calendar month; and

c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

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

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.c Emission Limitation:

1.6 pounds of sulfur dioxide emissions per million Btu input.

Applicable Compliance Method:

To determine the actual emission rate for SO2, the following equation shall be used:

E (lb/mmBtu) = [(1 x 10^6) / H] x D x S x 1.974

Where:

E = SO2 emission rate, in lb/mmBtu;

H = heat content of the liquid fuel, in Btu/gal;

D = density of the liquid fuel, in lb/gal; and

S = decimal fraction of sulfur in the liquid fuel.

2. If required, the permittee shall conduct, or have conducted, SO2 emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 1.6 lbs/mmBtu actual heat input in accordance with the following requirements:

Compliance with the allowable mass emission rate for SO2 shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 and the procedures in OAC rule 3745-18-04.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Erie City Model VL, 33 mmBtu/hr, natural gas and no. 2 fuel oil-fired boiler	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Erie City VC Boiler (B003)

Activity Description: Boiler - Gas and Oil Rated: 55 MMBTU/hr Erie City Model VC

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Erie City Model VC, 55 mmBtu/hr, natural gas and no. 2 fuel oil-fired boiler	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit.

2. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

a. A sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds of sulfur dioxide/mmBtu actual heat input.

b. A heat content that is greater than or equal to 136,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate in lb/mmBtu.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternatively, equivalent methods may be used upon written approval by the Ohio EPA Northeast District Office.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

a. The total quantity of oil received in each shipment (gallons);

b. The weighted* average sulfur dioxide emissions rate (lb/mmBtu) for the oil received during each calendar month; and

c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

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

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.c Emission Limitation:

1.6 pounds of sulfur dioxide emissions per million Btu input.

Applicable Compliance Method:

To determine the actual emission rate for SO2, the following equation shall be used:

E (lb/mmBtu) = [(1 x 10^6) / H] x D x S x 1.974

Where:

E = SO2 emission rate, in lb/mmBtu;

H = heat content of the liquid fuel, in Btu/gal;

D = density of the liquid fuel, in lb/gal; and

S = decimal fraction of sulfur in the liquid fuel.

2. If required, the permittee shall conduct, or have conducted, SO2 emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 1.6 lbs/mmBtu actual heat input in accordance with the following requirements:

Compliance with the allowable mass emission rate for SO2 shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 and the procedures in OAC rule 3745-18-04.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Erie City Model VC, 55 mmBtu/hr, natural gas and no. 2 fuel oil-fired boiler	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: South Property Water Heater (B005)

Activity Description: South Property Water Heater

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
17 mmBtu/hr natural gas-fired water heater (BL-09-08A/SR)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.
	40 CFR Part 60, Subpart Dc	None.
	OAC rule 3745-31-05 PTI 02-0115	Emissions of sulfur dioxide shall not exceed 0.0006 lb/mmBtu heat input. Emissions of nitrogen oxides shall not exceed 0.14 lb/mmBtu heat input. Emissions of carbon monoxide shall not exceed 0.084 lb/mmBtu heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the amount of natural gas combusted during each day.

2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

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

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall determine compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

Emissions of sulfur dioxide shall not exceed 0.0006 lb/mmBtu heat input.

Applicable Compliance Method:

Compliance shall be based on the emission factor outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 7/98), using the following equation:

E(lb/mmBtu) = EF / 1000 Btu/scf

Where:

EF = emission factor, 0.6 lb SO2 per million scf

1.d Emission Limitation:

Emissions of nitrogen oxides shall not exceed 0.14 lb/mmBtu heat input.

Applicable Compliance Method:

Compliance shall be based on the emission factor outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 7/98), using the following equation:

E(lb/mmBtu) = EF / 1000 Btu/scf

Where:

EF = emission factor, 100 lbs NOx per million scf

V. Testing Requirements (continued)

1.e Emission Limitation:

Emissions of carbon monoxide shall not exceed 0.084 lb/mmBtu heat input.

Applicable Compliance Method:

Compliance shall be based on the emission factor outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 7/98), using the following equation:

E(lb/mmBtu) = EF / 1000 Btu/scf

Where:

EF = emission factor, 84 lbs CO per million scf

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
17 mmBtu/hr natural gas-fired water heater (BL-09-08A/SR)	None.	None.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: South Property Water Heater (B006)

Activity Description: South Property Water Heater

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
17 mmBtu/hr natural gas-fired water heater (BL-09-08A/SR)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.
	40 CFR, Part 60, Subpart Dc	None.
	OAC rule 3745-31-05 PTI 02-0115	Emissions of sulfur dioxide shall not exceed 0.0006 lb/mmBtu heat input. Emissions of nitrogen oxides shall not exceed 0.14 lb/mmBtu heat input. Emissions of carbon monoxide shall not exceed 0.084 lb/mmBtu heat input.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the amount of natural gas combusted during each day.

2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

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

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall determine compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

Emissions of sulfur dioxide shall not exceed 0.0006 lb/mmBtu heat input.

Applicable Compliance Method:

Compliance shall be based on the emission factor outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 7/98), using the following equation:

E(lb/mmBtu) = EF / 1000 Btu/scf

Where:

EF = emission factor, 0.6 lb SO2 per million scf

1.d Emission Limitation:

Emissions of nitrogen oxides shall not exceed 0.14 lb/mmBtu heat input.

Applicable Compliance Method:

Compliance shall be based on the emission factor outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 7/98), using the following equation:

E(lb/mmBtu) = EF / 1000 Btu/scf

Where:

EF = emission factor, 100 lbs NOx per million scf

V. Testing Requirements (continued)

1.e Emission Limitation:

Emissions of carbon monoxide shall not exceed 0.084 lb/mmBtu heat input.

Applicable Compliance Method:

Compliance shall be based on the emission factor outlined in AP-42, Section 1.4 (Natural Gas Combustion - Fifth Edition, 7/98), using the following equation:

E(lb/mmBtu) = EF / 1000 Btu/scf

Where:

EF = emission factor, 84 lbs CO per million scf

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
17 mmBtu/hr natural gas-fired water heater (BL-09-08A/SR)	None.	None.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Bldg 12 Parts Cleaning (L003)

Activity Description: Parts Cleaning Area (Building 12)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Solvent metal cold cleaning (10 units):		
7 tanks	OAC rule 3745-21-09(O)(2)	See Section A.II.1.
3 spray booths	OAC rule 3745-21-09(O)(2)	Emissions of volatile organic compounds from the solvent spray booths shall not exceed 5 tons per year. See Additional Term and Condition 2.a. See Section A.II.1.

2. Additional Terms and Conditions

2.a In accordance with paragraph (O)(6)(a) of OAC rule 3745-21-09, the requirement of OAC rule 3745-21-09(O)(2)(d)(v) (i.e., that any solvent spray be a solid fluid stream at a pressure that does not exceed ten pounds per square inch gauge) shall not apply to these solvent spray booths provided that the combined VOC emissions from these booths are less than five tons per calendar year.

The rule citation (i.e., paragraph (O)(6)(a)) reflects the new exemption added to OAC rule 3745-21-09(O) for cold cleaners that are research and development sources, as defined under section 3704.01 of the Ohio Revised Code, provided that the owner or operator maintains records which demonstrate that the combined VOC emissions from the exempted research and development sources are less than 5 tons per calendar year. The revised rule containing the exemption was adopted by the Director of Ohio EPA in May 1999. The USEPA has agreed to consider the rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the rule citation as a revision to the Ohio SIP for VOC.

II. Operational Restrictions

1. Each owner or operator of a cold cleaner shall:

a. Equip the cold cleaner with either:

i. a cover; and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute measured at one hundred degrees Fahrenheit, or the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand; or

ii. a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided the sink-like work area has an open drain area of less than sixteen square inches and provided the solvent neither is heated above one hundred twenty degrees Fahrenheit nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at one hundred degrees Fahrenheit.

b. Equip the cold cleaner with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at one hundred degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining unless an internal type drainage device cannot fit into the cleaning system.

c. Install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at one hundred degrees Fahrenheit, or if the solvent is heated above one hundred twenty degrees Fahrenheit:

i. freeboard that gives a freeboard ratio greater than or equal to 0.7;

ii. water cover (solvent must be insoluble in and heavier than water); or

iii. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director.

d. Operate and maintain the cold cleaner in accordance with the following practices to minimize solvent evaporation from the unit:

i. provide a permanent, legible, conspicuous label, summarizing the operating requirements;

ii. store waste solvent in covered containers;

iii. close the cover whenever parts are not being handled in the cleaner;

iv. drain the cleaned parts until dripping ceases; and

v. clean only materials that are neither porous nor absorbent.

III. Monitoring and/or Record Keeping Requirements

1. Any owner or operator of a solvent metal cleaning operation shall maintain records of the following information in a readily accessible location for at least five years and shall make these records available to the Director upon verbal or written request:

a. All control equipment maintenance.

b. For cold cleaners, the types of solvents employed and the vapor pressure of each solvent (pounds per square inch absolute) measured at one hundred degrees Fahrenheit.

c. The results of all emissions tests conducted to demonstrate compliance with the terms and conditions of this permit.

d. The annual solvent usage in the three solvent spray booths.

e. The amount of solvent sent offsite for recycle or disposal from the three solvent spray booths.

IV. Reporting Requirements

1. Each year, the permittee shall submit an annual report, by January 31, for the preceding calendar year. Each annual report shall specify the annual VOC emissions for this emissions unit, determined using the equation provided in Section A.V.1 of this permit.

V. Testing Requirements

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

Emissions Limitation:

Emissions of volatile organic compounds from the solvent spray booths shall not exceed 5 tons per year.

Applicable Compliance Method:

To determine the actual VOC emission rate from the three solvent spray booths, the following equation shall be used:

$E = (Ls - Lw) \times D/2000$

Where;

E = VOC emission rate, in tons/year;

Ls = liquid volume of cleaning solvent employed in all solvent spray booths each year, in gallons;

Lw = liquid volume of cleaning solvent sent offsite as waste from all solvent spray booths, in gallons; and

D = density of the cleaning solvent utilized in the three solvent spray booths, in pounds per gallon.

If more than one type of cleaning solvent is employed in the three solvent spray booths, the above equation shall be used for each cleaning solvent. The total volatile organic compound emission rate shall be determined as the sum of the annual volatile organic compound emission rates for all cleaning solvents employed in the three solvent spray booths.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Solvent metal cold cleaning (10 units):		
7 tanks	None.	None.
3 spray booths	None.	None.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Facility (P009)

Activity Description: Engine Test Facility

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Engine test facility:		
Engine test stands, including 33 gasoline-fueled test stands and 18 diesel-fueled test stands	OAC rule 3745-17-07(A)	None. See Additional Term and Condition A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	None. See Additional Term and Condition A.I.2.b below.
9 engines (7 gasoline-fueled and 2 diesel-fueled) used to operate mechanical equipment	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average except as provided by the rule.
	OAC rule 3745-17-11(B)(5)	Particulate emissions shall not exceed 0.310 pound per million Btu of actual heat input. See Additional Terms and Conditions A.I.2.c and A.I.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

2. Additional Terms and Conditions

2.a These engine test stands are exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because these test stands are not subject to the requirements of OAC rule 3745-17-11.

2.b The uncontrolled mass rate of particulate emissions from the engine test stands is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

2.c The internal combustion engines used to operate mechanical equipment have a rated power of less than or equal to 600 horsepower and are not used to, or intended to, propel any vehicle.

2. Additional Terms and Conditions (continued)

2.d The emission limitation specified in this rule citation has been revised based upon a change in the applicable emission factor contained in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors. The revised rule was adopted by the Director of Ohio EPA in December, 1997. The U.S. EPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of U.S. EPA approval of this limitation as a revision to the Ohio SIP for particulate matter.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks of the engines used to operate mechanical equipment, when the engines are in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack(s) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I of this permit shall be determined in accordance with the following methods:

1.a Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Particulate emissions shall not exceed 0.310 pound per million Btu of actual heat input.

Applicable Compliance Method:
If required, particulate matter emissions shall be determined in accordance with the following method(s): Methods 1, 2, 3, 4, and 5 of 40 CFR Part 60, Appendix A, and procedures from OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Engine test facility:		
Engine test stands, including 33 gasoline-fueled test stands and 18 diesel-fueled test stands	None.	None.
9 engines (7 gasoline-fueled and 2 diesel-fueled) used to operate mechanical equipment	None.	None.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: North, South Pilot Plant (P011)

Activity Description: North and South Pilot Plant

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
North and south pilot plant reactors (27 reactors, pressurized and non-pressurized) for lubricant additives and chemicals controlled by a wet scrubber and thermal incinerator with a flare as backup	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall be reduced by at least eighty-five percent (85%), by weight, as an overall control efficiency.
	OAC rule 3745-21-07(G)(6)	Ninety percent or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(C).

2. Additional Terms and Conditions

2.a OAC rule 3745-21-07(G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% reduction in OC emissions. The thermal oxidizer is employed to comply with the requirement to achieve an 85% reduction in OC emissions instead of complying with the OC emission limits of 8 pounds per hour and 40 pounds per day.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the combustion temperature. The temperature monitor and recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information for each day:

a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation. This log shall also indicate when the reactors were vented to the backup flare.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation. These summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. The reports shall also indicate the date(s) and time(s) that the reactors vented to the backup flare.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency (capture and control) limitation for organic compounds and the ninety percent control efficiency requirement for the thermal incinerator.

c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

V. Testing Requirements (continued)

d. The emission tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northeast District Office.

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

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
North and south pilot plant reactors (27 reactors, pressurized and non-pressurized) for lubricant additives and chemicals controlled by a wet scrubber and thermal incinerator with a flare as backup	None.	None.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: North Pilot Plant Expansion (P012)

Activity Description: North Pilot Plant Expansion

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
North pilot plant reactors (3 reactors) for lubricant additives and chemicals controlled by a wet scrubber and thermal incinerator with a flare as backup	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall be reduced by at least eighty-five percent (85%), by weight, as an overall control efficiency. See A.2.a below.
	OAC rule 3745-21-07(G)(6)	Less stringent than BAT limit.
	OAC rule 3745-18-06	Less stringent than BAT limit.
	OAC rule 3745-31-05(A)(3) PTI 02-2149	See A.2.b, A.2.c, A.2.d, and A.2.e below.

2. Additional Terms and Conditions

2.a OAC rule 3745-21-07(G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% reduction in OC emissions. The thermal oxidizer is employed to comply with the requirement to achieve an overall 85% reduction in OC emissions instead of complying with the OC emission limits of 8 pounds per hour and 40 pounds per day.

2.b The permittee shall employ Best Available Technology in the design, operation, and maintenance of this emissions unit and its air pollution control equipment in order to minimize fugitive and process emissions of volatile organic compounds into the ambient air.

2.c The National Air Oil Burner (flare), WS-1, shall be operated with no visible emissions except for periods not to exceed a total of five minutes during any one hundred twenty consecutive minutes.

2.d The thermal incinerator, WN-1, shall be operated to reduce the VOC emissions vented to it with a destruction efficiency of at least ninety-eight percent by weight.

2.e The packed tower scrubber system, M-624 A-F, shall be designed and operated to reduce the hydrogen sulfide and hydrochloric acid vented to it with a removal efficiency of at least ninety-eight percent by weight.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. This emissions unit shall not be used to manufacture more than 2.2 million pounds of product in any one year.

II. Operational Restrictions (continued)

3. The permittee shall employ good maintenance practices to prevent, detect, and repair VOC leaks from the process equipment, control device, and other equipment containing or conveying VOCs.

4. The flare shall be operated with a pilot flame present at all times.

5. The minimum free sodium hydroxide concentration in the scrubber liquor shall be the minimum concentration established during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the combustion temperature. The temperature monitor and recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

2. The permittee shall collect and record the following information for each day:

a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation. This log shall also indicate when the reactors were vented to the backup flare.

3. The permittee shall monitor and record the free sodium hydroxide concentration (percent) of the scrubber liquor while the emissions unit is in operation. The permittee shall record the percent free sodium hydroxide concentration before and after each batch reaction. The percent free sodium hydroxide concentration before and after some batch reactions, i.e., those reactions where the operators know before the reaction takes place (based upon operating experience) that the free sodium hydroxide concentrations will be well above the concentration required by term A.II.5, may be based on the stoichiometry of the reactions.

4. The permittee shall properly operate and maintain equipment to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee for proper operation of such monitoring device and recorder.

The permittee shall record periods during which there was no pilot flame.

5. The permittee shall maintain annual records of the amount of product, by weight, produced in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation. These summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. The reports shall also indicate the date(s) and time(s) that the reactors vented to the backup flare.

3. The permittee shall submit deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

IV. Reporting Requirements (continued)

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber liquor free sodium hydroxide concentration (percent) did not comply with the free sodium hydroxide concentration established during the most recent emission test that demonstrated the emissions unit was in compliance.

5. The permittee shall submit annual reports of the amount of product, by weight, produced in this emissions unit. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency (capture and control) limitation for organic compounds and the ninety-eight percent control efficiency requirement for the thermal incinerator.

c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The emission tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northeast District Office.

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

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

2. Emission Limitation:
The thermal incinerator, WN-1, shall be operated to reduce the VOC emissions vented to it with an efficiency of at least ninety-eight percent by weight.

Applicable Compliance Method(s):
Compliance shall be determined in accordance with Section A.V.1 of these terms and conditions.

V. Testing Requirements (continued)

3. Emission Limitation:
Emissions of organic compounds shall be reduced by at least eighty-five percent (85%), by weight, as an overall control efficiency.

Applicable Compliance Method(s):
Compliance shall be determined in accordance with Section A.V.1 of these terms and conditions.

4. Emission Limitation:
The packed tower scrubber system, M-624 A, B, C, shall be designed and operated to reduce the hydrogen sulfide and hydrochloric acid vented to it with an efficiency of at least ninety-eight percent by weight.

Applicable Compliance Method(s):
The permittee shall conduct, or have conducted, emission testing for the packed tower scrubber system, M-624 A, B, C, in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of this permit.

b. Inlet and outlet emission testing shall be conducted to determine compliance with the removal efficiency for hydrogen sulfide and hydrochloric acid of ninety-eight percent, by weight.

c. Appropriate test methods shall be employed to demonstrate compliance with the removal efficiency requirement for the packed tower scrubber. The test methods and procedures selected shall be subject to Ohio EPA approval and shall be based on a consideration of the air contaminants present and their total concentration and the potential presence of interfering gases.

d. The emission tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northeast District Office.

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

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

5. Emission Limitation:
No visible emissions from the flare, except for a period not to exceed a total of 5 minutes during any one hundred and twenty consecutive minutes.

Applicable Compliance Method(s):
Compliance shall be determined in accordance with U.S. EPA reference method 22, as set forth in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
North pilot plant reactors (3 reactors) for lubricant additives and chemicals controlled by a wet scrubber and thermal incinerator with a flare as backup	None.	None.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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