John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

1/13/2015

Certified Mail

Mrs. Kelly Winfield
The Lubrizol Corporation
155 Freedom Road
Painesville, OH 44077

Facility ID: 0243000024
Permit Number: P0084846
County: Lake

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Ohio Environmental Protection Agency (EPA)Preliminary Proposed Title V permit that was issued in draft form on 10/30/2014. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA 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, you now have the opportunity to raise your concerns. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

If you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA DAPC, Northeast District Office

Response to Comments

Facility ID:	0243000024
Facility Name:	The Lubrizol Corporation
Facility Description:	Manufacturer of specialty chemicals
Facility Address:	155 Freedom Road Painesville, OH 44077-1234 Lake County
Permit:	P0084846, Title V Permit - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Lake County News-Herald on 11/01/2014. The comment period ended on 12/01/2014.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: Miscellaneous typographical and word changes

a. Comment: Lubrizol requested miscellaneous typographical and word changes to various emissions units.

b. Response: All were corrected if appropriate.

2. Topic: 40 CFR 63, Subpart JJJJJJ

a. Comment: Lubrizol requests that B001, B002, and B003 be exempt from 40 CFR 63, Subpart JJJJJJ, as existing, natural gas-fired boilers with limited liquid fuel usage.

b. Response: Wording was added to clarify that B001, B002, and B003 are exempt from the requirements of 40 CFR 63, Subpart JJJJJJ, and to limit liquid fuel usage to only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

3. Topic: 40 CFR 63, Subpart IIII

a. Comment: Lubrizol requested clarification on the emissions units subject to 40 CFR 63, Subpart IIII.

b. Response: 40 CFR 63, Subpart IIII was added in the Insignificant Emissions Unit Table for P076, P077 and P123.

4. Topic: Requirement to monitor F-4 and S-4 flare pilot light burner

a. Comment: Lubrizol requested removing the requirement to monitor the F-4 flare pilot light burner for P052 and S-4 flare pilot light burner for P124 at all times.

b. Response: The requirement originated from the PTIs and must remain.

PRELIMINARY PROPOSED

Division of Air Pollution Control
Title V Permit
for
The Lubrizol Corporation

Facility ID:	0243000024
Permit Number:	P0084846
Permit Type:	Renewal
Issued:	1/13/2015
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Title V Permit
for
The Lubrizol Corporation

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Authorization

Facility ID:	0243000024
Facility Description:	Manufacturer of specialty chemicals
Application Number(s):	A0015424, A0015425, A0050257
Permit Number:	P0084846
Permit Description:	Renewal of the Title V operating permit for a fuel additive manufacturing facility including process reactors, storage tanks, loading racks, steam generating boilers and a waste heat recovery incinerator to dispose of the waste.
Permit Type:	Renewal
Issue Date:	1/13/2015
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0084845

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

The Lubrizol Corporation
155 Freedom Road
Painesville, OH 44077-1234

Ohio Environmental Protection Agency (EPA)District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northeast District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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 recordingsfor continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submittedscheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the

probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Northeast District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northeast District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally

enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northeast District Office unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. 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.

(Authority for term: OAC rule 3745-77-07(A)(5))

6. 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.

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

a) 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 permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. 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.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. 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.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. 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 (18) 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.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. 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.

(Authority for term: OAC rule 3745-77-07(B))

13. 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:

(1) 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.

(2) 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.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) 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 Ohio EPA DAPC, Northeast District Office 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:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) 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 Director (the Ohio EPA DAPC, Northeast District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) 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.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms

and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

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

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. 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.

(Authority for term: OAC rule 3745-77-07(F))

15. 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office 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).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. 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.

(Authority for term: OAC rule 3745-77-07(G))

17. 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 of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions 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.

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.

(Authority for term: OAC rule 3745-77-07(I))

18. 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 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. 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.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. 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.

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11)))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to theOhio EPA DAPC, Northeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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, 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.)

25. Records Retention Requirements Under State Law Only

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.

26. 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.

(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

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 Ohio EPA DAPC, Northeast District Office 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).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northeast District Office must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

a) None

2. Chemical Accident Prevention Provisions, 40 CFR Part 68: Risk Management Programs Under the Clean Air Act, Section 112(r)(7).

Chemicals covered are those regulated substances present above the threshold quantity in a process, as listed under 40 CFR 68.130 and determined under 40 CFR 68.115.

This facility developed and registered a risk management plan pursuant to section 112(r) of the Act and is required to comply with the requirements of section 112(r) and the regulations adopted thereunder.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 68]

3. Voluntary Requirements to Limit Hazardous Air Pollutants Facility-wide

a) Voluntary emission limitations established according to OAC rule 3745-77-07(B)

(1) Beginning no later than May 10, 2008, the emissions of hazardous air pollutants (HAPs), as defined in Section 112(b) of Title III of the Clean Air Act, from all the emissions units at this facility, shall not exceed 9.9 TPY for any individual HAP and 24.9 TPY for total combined HAPs, as rolling, 12-month summations.

The company proposed these emission limits to avoid being classified as a major source for HAPs as defined in section 63.2 of 40 CFR Part 63 for any Maximum Achievable Control Technology (MACT) standards with an initial compliance date on or after November 10, 2006 (i.e., Miscellaneous Organic Chemical Manufacturing MACT, 40 CFR Part 63, Subpart FFFF; and the Organic Liquid Distribution (Non-Gasoline) MACT), 40 CFR Part 63, Subpart EEEE).

(2) Compliance with the emission limitation for individual HAP and total combined HAP shall be based upon a rolling, 12-month summation of the monthly emissions beginning no later than November 10, 2006, utilizing data for the previous 12 months.

b) Monitoring and Recordkeeping

(1) In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the information designated in B.3.b)(2)a through B.3.b)(2)l for the following emissions unit categories:

a. Combustion Units (B001, B002, B003, B004, B009, and insignificant units B006, B008);

b. Waste Incinerator (N001);

c. Reactor Process Vents (P006, P007, P012, P013, P014, P015, P018, P020, P022, P024, P025, P029, P030, P034, P036, P051, P052, P053, P073, P074, and P124);

d. Loading Operations (P038, P039, P040, P041, P042, P044, P045, P046, P049, P055, P056, P057, P058, P060, P061, P062, P063, P067, P068, P071, and P075);

e. All Storage Tanks;

f. Insignificant Emissions Units; and

g. Fugitive emissions from leaking components in HAP service not otherwise included in the categories above.

All other emissions units listed in the Title V permit either do not emit HAPs, or the emissions are so negligible that they cannot be reliably quantified. Total HAP emissions from these sources are presumed to be less than 0.1 tpy (the difference between the emission limitation in this permit and the major source threshold).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

(2) HAP emissions shall be calculated as follows:

a. For storage tanks, loading operations, and reactor process vents, the permittee shall use the same calculation methodologies for determining HAP emissions as specified in this permit for determining VOC emissions, and then multiplying the VOC emissions by the weight percent HAPs present in the vapor and adjusting for the control efficiency of any emissions control system. Control efficiencies for organic HAPs shall be the same as the VOC control efficiencies determined in accordance with Title V requirements. Flares shall be assumed to have 98 percent control efficiency for organic HAPs and VOCs. See USEPA, Compilation of Air Pollutant Emission Factors (AP-42) section 13.5-4 (January 1995). Control efficiencies for inorganic HAPs (i.e., Hydrogen chloride, and halides) shall be determined by an engineering assessment. Such an engineering assessment will be completed by November 10, 2006 and submitted to the agency for review and approval. The control efficiencies so determined will be used to compute emissions for the 12 month period from November 2005 to November 2006 and thereafter. The permittee may revise the control efficiencies by submitting new information sufficient to demonstrate to the Ohio EPA Northeast District Office that another control efficiency is more representative of actual control device operating conditions. A change in a control efficiency factor shall constitute a minor modification to this permit. (See further details below.)

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

b. For boilers, HAP emissions shall be computed using emission factors from U.S. EPA's FIRE database based on SCC codes, and the amount of fuel burned. The permittee shall keep records of the amount of fuel burned each month for each emissions unit or category. The permittee may propose and the Ohio EPA Northeast District Office shall approve new emission factors to replace these FIRE emission factors upon demonstrating that the new factors are more accurate and better representative of actual emissions from the relevant

emissions units. A change in these emission factors shall constitute a minor modification to this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

c. For the Waste Incinerator (N001), HAP emissions shall be determined based on site-specific emissions factors (expressed in pounds per hour) developed from source test and continuous monitoring data multiplied by actual hours of incinerator operation each month. The current emission factors for the incinerator are:

HAP	Em. Factor	Units
Lead	0.00087300	lb/hr burning waste
Mercury	0.00013650	lb/hr burning waste
Arsenic	0.00005480	lb/hr burning waste
Beryllium	0.00000170	lb/hr burning waste
Cadmium	0.00001130	lb/hr burning waste
Chromium	0.00008650	lb/hr burning waste
Phenol	0.00000003	lb/hr burning waste
Naphthalene	0.00000460	lb/hr burning waste
Chlorine	0.00100000	lb/hr burning waste

Hydrochloric acid emissions shall be based upon the chlorine content of the quarterly waste analysis.

The permittee may propose and the Ohio EPA Northeast District Office shall approve new emission factors to replace these emission factors upon demonstrating that the new factors are more accurate and better representative of actual emissions from the relevant emissions units. A change in these emission factors shall constitute a minor modification to this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

d. Fugitive emissions of HAPs from equipment leaks shall be computed using the emission factors from "Protocol for Equipment Leak Emission Estimates" EPA-453/R-95/017 issued November 1995, or other approved alternate, and the number of pumps, valves, flanges, etc. to calculate the pounds per hour of fugitive VOC emissions, using SOCMI leak/no-leak, or ppmv screening value factors. The monthly fugitive HAP emissions (in pounds) shall be calculated by multiplying pounds per hour VOC emission rate by the percent HAPs in the fluid and multiplying the result by the monthly hours of operation of the equipment with HAPs present. If necessary, monitoring data to establish typical percent leaks or ppmv screening factors for sources in HAP service will be conducted prior to November 10, 2006, and will be used to determine emissions for the 12 month period from November 2005 to November 2006. Monitoring methods to establish leakage rates and maintenance methods are further described in 4.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

e. HAP emissions from other fugitive and stack sources shall be computed monthly using other Ohio EPA-approved calculation methods. These shall include ball houses, drip trays, and painting. Emissions from spills, hold tanks, charge tanks, filter cake hoppers, filters, and filter tanks, shall be included as parts of reactor processes.

The specific methodology used to calculate the HAP emissions, example calculations using the approved methodology, and the emission factors shall be submitted upon final issuance of this permit and shall be subject to the review and approval of the Ohio EPA Northeast District Office on or before November 10, 2006. The permittee may revise the calculation methodologies by submitting methodology revisions subject to the review and approval of the Ohio EPA Northeast District Office. A change in the calculation methodology shall constitute a minor modification to this permit. Calculations of all HAP emission factors shall be kept on site and available for Ohio EPA review.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

f. For reactor vents, HAP emissions shall be determined based on product-specific emission factors (expressed in pounds per batch of each product) multiplied by the number of batches of that product made in a month, to determine the pounds of HAP emitted per product per month, and summed to reflect the total emissions from all products processed in the reactors in a month. The emission factors for the reactor vents shall be computed based on the engineering calculation methods for process vents contained in the Pharmaceutical NESHAP [40 CFR Part 63.1257(d)] or other Ohio EPA-approved calculation methods. The specific methodology used to calculate the HAP emissions, example calculations using the approved methodology, and the emission factors shall be submitted upon final issuance of this permit and shall be subject to the review and approval of the Ohio EPA Northeast District Office. Calculations of all HAP emission factors shall be kept on site and available for Ohio EPA review.

Similar products may be grouped together provided that the emission factor assigned to that group reflects the highest calculated emission factor for all products in the group. For new products that require a new emission factor, the permittee shall calculate the emission factor using the method described above and submit that calculation to the Ohio EPA's Northeast District Office. The new emission factor can be used immediately to determine monthly emissions but any adjustments to the emission factor required after Ohio EPA's review must be applied retroactively to the date the new product was introduced. A change in these emission factors shall constitute a minor modification to this permit. For reactor vents, the permittee shall submit HAP emission factors for all products produced in each process emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

g. For reactor process vents, the permittee shall collect and record the following information for each month:

i. the name of each hazardous air pollutant (HAP) emitted from the emissions unit;

ii. the HAP emission rate for each HAP, before control, in pounds per month for each emissions unit, using the following equation:

E (Uncontrolled) = (amount of each HAP emitted, in pounds/month);

iii. the HAP emissions for each HAP, after control, in pounds per month for each emissions unit, using the following equation:

E (Controlled) = (uncontrolled HAP emission rate, in lbs/month) x (1 - (CE/100))

where:

CE = the overall control efficiency of the emissions control system. For organic HAPs this shall be the same as the VOC control efficiency. For inorganic HAPs the control efficiency shall be determined by an engineering assessment pursuant to B.3.b)(2)a.

iv. the total individual HAP emission rate, after control (in lbs of HAP/month, determined by adding the values for each emissions unit);

v. the rolling, 12-month summation of the monthly HAP emissions for each individual HAP (in pounds, calculated by summing the monthly HAP emissions for the preceding 11 months plus the HAP emissions for the current month for all emissions units); and

vi. the total combined HAP emissions, in tons per month and tons per rolling, 12-month period (the sum of each HAP emitted in pounds divided by 2000 lbs/ton for all emissions units).

A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA Northeast District Office contact.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

h. For loading operations, the permittee shall collect and record each month the following information:

i. the throughput of each liquid containing HAPs, in gallons;

ii. the loading method for each liquid loaded;

iii. the method of HAP destruction used for each type of liquid loaded and the estimated overall HAP control efficiency (if applicable), in percent;

iv. the true vapor pressure of the liquid, in psia;

v. the molecular weight of vapors, in lb/lb-mol;

vi. the bulk temperature of liquid loaded, in degrees Fahrenheit; and

vii. the weight percent of each individual HAP in the vapors.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

i. For loading operations, the permittee shall record every month the sum of HAP emissions (MHAP) for each individual HAP from each liquid loaded according to the following equation:

MHAP = the sum, from i=1 to i=n, of (%HAP)(LL)(MTL / 1000)(1-C)(ton/2000 lbs)

where:

%HAP = the weight% HAP in the vapors;

i = each individual liquid loaded;

n = the total number of liquids loaded;

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

C = overall control efficiency of the emissions control system (for organic HAPs this shall be the same as the VOC control efficiency).

For inorganic HAPs the control efficiency shall be determined by an engineering assessment pursuant to B.3.b)(2)a.

LL = the loading loss, in lb/1000 gal of liquid loaded, and is calculated according to the following equation from AP-42 at 5.2-4:

LL= (12.46 SPM)/ (T+460)

where:

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

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

j. For storage tanks containing HAPs, the permittee shall maintain monthly records documenting the following information:

i. the name of the material being stored;

ii. the weight percent of each individual HAP in the vapors; and

iii. the monthly throughput of liquid, in gallons.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

k. For storage tanks containing HAPs, HAP emissions shall be computed using the throughput data, the storage tank dimensions, and U.S. EPA emission factors and equations found in AP-42, Section 7.1.3, "Emission Factors for Organic Liquid Storage Tanks" (September 1997), accounting for the weight percent HAPs in the vapors and adjusting for the control efficiency of any emissions control system.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

l. The permittee shall maintain records for the entire facility each month of the following information:

i. the total facility-wide emissions (and associated calculations) for each individual HAP, in pounds or tons per year (calculated by summing the individual HAP emission rates from all the emissions units at the facility);

ii. the total facility-wide emissions (and associated calculations) for total combined HAPs, in pounds or tons per year (calculated by summing total combined HAPs emission rates from all the emissions units at the facility);

iii. the rolling, 12-month summation of the total individual HAP emissions rates for each HAP from all the emissions units at the facility, in tons; and

iv. the rolling, 12-month summation of the total combined HAP emissions rates from all the emissions units at the facility, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

c) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports, with the requirements specified in the Standard Terms and Conditions, including the following information:

a. an identification of each month during which the rolling, 12-month individual HAP emissions rate (from the facility) exceeded 9.9 tons, and the actual rolling, 12-month summation of each individual HAP emissions rate (from the facility) for each such month; and

b. an identification of each month during which the rolling, 12-month combination of all HAP emissions rates (from the facility) exceeded 24.9 tons, and the actual rolling, 12-month summation of the combination of all HAP emissions rates (from the facility) for each such month.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

(2) The permittee shall submit annual reports that summarize the annual emissions of the total combined HAP emissions for the facility and, if the total combined HAP emissions are 10 TPY or more, the annual emissions of each individual HAP. These reports shall cover the previous calendar year and shall be submitted by April 30 of each year.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-77-07(B)]

d) Testing Requirements

(1) Compliance with the allowable emission limitations in B.3.a)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

Beginning no later than May 10, 2008, the emissions of HAPs, as defined in Section 112(b) of Title III of the Clean Air Act, from all the emissions units at this facility, shall not exceed 9.9 tpy for any individual HAP and 24.9 tpy for total combined HAPs, as rolling, 12-month summations.

<u>Applicable Compliance Methods</u>:

Compliance shall be demonstrated based upon the record keeping requirements specified in B.3.b)(1) and B.3.b)(2).

4. Methodology to Monitor and Establish Fugitive Piping Leakage Rates and Maintain Equipment, as referenced in B.3.b)(2)d:

a) Calculation Methods Using SOCMI Factors :

(1) Fugitive piping emissions shall be computed using SOCMI factors consistent with EPA document "Protocol for Equipment Leak Emission Estimates EPA-453/R-95/017 issued November 1995. This document contains several different types of SOCMI kg/hr emission factors:

SOCMI average emission factors (Table 2-1);

SOCMI screening range emission factors (Table 2-5), with leak/no-leak factors for > vs < 10,000 ppmv TOC;

SOCMI leak rate/screening value correlations (Table 2-9). (These use specific ppmv values.); and

Default-zero values: SOCMI process units (Table 2-11).

The appropriate SOCMI kg/hr emission factors to use for computing fugitive piping leakage rates from each source at the facility will be determined according to B.4.a)(2) and B.4.a)(3) below.

(2) Equipment Using Instrument Monitoring For Leaks:

a. A representative sample of specific types of equipment (reactors, blend tanks, storage tanks, and filtration systems) in HAP service will be monitored prior to November 10, 2006 to measure ppmv TOC emissions from the following components: valves, flanges, pump seals, mixer seals, compressor seals, open ended lines, and pressure relief valves.

b. The representative sample of equipment shall account for at least 25 percent of potential fugitive piping HAP emissions from all such equipment "in HAP service" based on SOCMI average emission factors. (Sources "in HAP Service" are defined to contain at least 5 percent HAP for 300 hrs/year or more). The specific equipment in the representative sample may be changed as needed to continue to account for at least 25 percent of potential fugitive piping HAP emissions.

c. For the monitored equipment, emissions will be computed based on the appropriate SOCMI leak/no-leak or ppmv factors from SOCMI Table 2-5, 2-9, or 2-11.

d. A list of the specific representative equipment to be monitored shall be supplied to the Ohio EPA Northeast District Office by the compliance date (currently November 10, 2006). This list shall also identify the approximate percent of potential fugitive piping HAP emissions accounted for by the representative equipment.

e. The ppm TOC values measured for the representative equipment shall be used to determine the average leakage rate for each component type. (Component types would include valves, flanges, pump seals, etc. in light liquid, heavy liquid, or gas service.) (Leakage rates will be based on SOCMI leak rate factors from Table 2-5, 2-9, or 2-11). The average leakage rate data for each type of component determined from representative equipment monitoring data may be used to estimate the leakage rate of such sources for other equipment that was not monitored.

(3) Equipment Not Using Instrument Monitoring For Leaks:

a. If the vapor pressure of the fluid is less than 0.147 psia at processing temperatures, fugitive emissions may be estimated using SOCMI no-leak factors from Table 2-5. (Texas Natural Resources Conservation Commission document "Air Permit Technical Guidance for Chemical Sources: Equipment Leak Fugitives", dated October 2000, states that the theoretical saturation concentration as ppmv TOC cannot exceed 10,000 if the fluid vapor pressure is less than 0.147 psia.) Alternatively, emissions may be estimated as in B.4.a)(3)b below.

b. If the vapor pressure of the fluid is greater than or equal to 0.147 psia at processing temperatures, fugitive emissions will be estimated based on the leakage rate data for each type of component from representative equipment monitoring, and the appropriate SOCMI leak rate factors from Table 2-5 or 2-9. This method may also be used if the vapor pressure is < 0.147 psia.

c. The number of each type of component (valves, flanges, pump seals, mixer seals, compressor seals, open ended lines, and pressure relief valves) associated with unmonitored equipment can be estimated based on the average number of such components for a type of equipment.

d. Fugitive piping HAP emissions will be computed for reactors, blend tanks, storage tanks, and filtration systems containing liquids with 0.1 percent or more of any individual HAP based on engineering judgment including but not limited to Material Safety Data Sheet information.

b) Continuous Compliance Assurance Monitoring and Maintenance Methods:

(1) The representative equipment will be monitored for ppmv TOC values yearly. Any components found to have >1000 ppmv TOC will be repaired. A reasonable effort will be made to complete repairs within 15 days.

(2) All storage tanks in HAP service, and their associated pumps and piping, shall be inspected monthly for leaks by audio, olfactory, and visual checks. A reasonable effort will be made to repair any leaks found within 15 days. During time periods when a component source was known to be leaking, emissions for the component shall be computed using the SOCMI factors for > 10,000 ppmv TOC unless ppmv data is available. If the sensory checks detect a leak, the permittee may choose to measure the ppmv TOC using a properly calibrated monitoring instrument, and compute emissions using the SOCMI emission factors most appropriate to the size of the leak.

(3) All reactor system tanks in continuous HAP service, and their associated pumps and piping, shall be inspected monthly for leaks by audio, olfactory, and visual checks. A reasonable effort will be made to repair any leaks found within 15 days. During time periods when a component source was known to be leaking, emissions for the component shall be computed using the SOCMI factors for > 10,000 ppmv TOC unless ppmv data is available. If the sensory checks detect a leak, the permittee may choose to measure the ppmv TOC using a properly calibrated monitoring instrument, and compute emissions using the SOCMI emission factors most appropriate to the size of the leak.

(4) Reactor system tanks in non-continuous HAP service making products containing 5 percent or more HAPs, and their associated pumps and piping, shall be inspected for leaks by audio, olfactory, and visual checks. Such inspections shall be made monthly, or per batch if such products are made less frequently than monthly. A reasonable effort will be made to repair any leaks found within 15 days. During time periods when a component source was known to be leaking, emissions for the component shall be computed using the SOCMI factors for > 10,000 ppmv TOC unless ppmv data is available. If the sensory checks detect a leak, the permittee may choose to measure the ppmv TOC using a properly calibrated monitoring instrument, and compute emissions using the SOCMI emission factors most appropriate to the size of the leak.

c) Record Keeping Requirements:

For fugitive emissions of HAPs from equipment leaks, the permittee shall collect and record the following information:

(1) Monthly Records:

a. the name of each fluid containing HAPs in the equipment;

b. the type of fluid (light liquid, heavy liquid, or vapor);

c. the hours that the fluid was present in the equipment;

d. the vapor pressure of the fluid in the equipment, in psia;

e. the lb/hr leakage rate for the equipment based on the appropriate SOCMI emission factors;

f. the weight % of each individual HAP in the leaks;

g. records of audio, olfactory, visual or instrument checks of equipment in HAP service inspected monthly; and

h. dates when components were found to be leaking, and date when repaired.

(2) Annual Records:

a. ppmv TOC readings for representative equipment components;

b. the identification of each representative equipment component;

c. dates when representative equipment components were found to be leaking, and date when repaired; and

d. the average leakage rate of each type of component for the representative equipment per SOCMI Table 2-5, 2-9, or 2-11.

(3) Batch Records:

a. records of audio, olfactory, visual or instrument checks of equipment in HAP service inspected each batch; and

b. dates when components were found to be leaking, and date when repaired.

5. 40 CFR Part 63, Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

The Ohio EPA has determined that emissions units B001, B002, and B003 are exempted from the requirements of Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources pursuant to 63.11195(e) and the definition of a gas-fired boiler.

The emissions units shall burn liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year per emissions unit. Sufficient records shall be kept to demonstrate the times of liquid fuel usage.

At this time, the Ohio EPA is not accepting delegation for area sources subject to the Maximum Achievable Control Technology NESHAP (MACT) rules. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA Region 5. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website http://www.ecfr.gov/ or by contacting the Ohio EPA Northeast District Office.

6. 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines - Area Source

The Ohio EPA has determined that emissions units B015, B016, B017, B018, B019, B020, B021, B022, P076, P077, P080, P081 and P123 are subject to the requirements of Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Emissions units installed or reconstructed after the effective date of this permit maybe be subject to this rule and shall be evaluated upon installation or reconstruction. At this time, the Ohio EPA is not accepting delegation for area sources subject to the Maximum Achievable Control Technology NESHAP (MACT) rules. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA Region 5. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website http://www.ecfr.gov/ or by contacting the Ohio EPA Northeast District Office.

7. 40 CFR Part 63, Subpart VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63, Subpart VVVVVV National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources. At this time, the Ohio EPA is not accepting delegation for area sources subject to the Maximum Achievable Control Technology NESHAP (MACT) rules. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA Region 5. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website http://www.ecfr.gov/ or by contacting the Ohio EPA Northeast District Office.

8. Determination of uncontrolled VOC emissions generated during the production of final products in the process emissions units

a) Monitoring and Recordkeeping Requirements

(1) The permittee shall develop emission factors for the amount of uncontrolled VOC emitted, either for each final product generated or for each batch run in the emissions unit, and shall include emissions from flushing. The emission factors shall be in units of pounds of VOC emitted per kilogram of final product generated, or pounds of VOC emitted per batch run.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The emission factors for the reaction vessels, and all other pieces of equipment associated with this emissions unit shall be computed based on calculation methods

from the Emission Inventory Improvement Program Guidance Document, Volume II, Chapter 16: Methods for Estimating Air Emissions from Chemical Manufacturing Facilities or other Ohio EPA-approved calculation methods. The VOC emission factors and detailed calculations shall be kept on site and available for Ohio EPA review.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) If necessary, the permittee shall conduct emission testing, at the request of the Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

9. Requirements for the operation of AC-12 Fm Inc thermal incinerator controlling organic compound emissions

a) Monitoring and Recordkeeping Requirements

(1) The acceptable average combustion temperature for any 3-hour block of time when an emissions unit is in operation and the process vent stream is vented to the incinerator, is not less than 1,600 degrees Fahrenheit, or shall meet the manufacturer's design specifications for temperature.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(LL)]

(2) The permittee shall properly operate and maintain equipment to continuously monitor and record the average combustion temperature at all times when an emissions unit is in operation and the process vent stream is vented to the incinerator, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The monitoring equipment shall be capable of accurately measuring the desired parameter. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The permittee shall record the following information each day when an emissions unit is in operation and the process vent stream is vented to the incinerator:

a. the average combustion temperature within the incinerator, in 3-hour blocks; and

b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(4) Whenever the average combustion temperature deviates from the operating limitation while an emissions unit is in operation and the process vent stream is vented to the incinerator, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment above the acceptable operating limitation, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (minutes) during which there was a deviation;

e. the average combustion temperature immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment when an emissions unit is in operation and the process vent stream is vented to the incinerator:

a. any 3-hour block of time when the average combustion temperature within the incinerator was less than the operating limitation;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the average combustion temperature within the incinerator into compliance with the acceptable value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly summaries that include a log of the downtime for the incinerator when an emissions unit was in operation and the process vent stream was vented to the incinerator.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for the AC-12 Fm Inc in accordance with the following requirements:

a. The emission testing shall be conducted within 1 year of issuance of the permit and between 54 months and 66 months thereafter.

b. The emission testing for AC-12 Fm Inc shall be conducted to demonstrate compliance with the destruction efficiency limitation for VOC.

c. The following test methods shall be employed to demonstrate compliance with the destruction efficiency limitation for VOC: Methods 1-4, 25 or 25A of 40 CFR Part 60, Appendix A or an alternative U.S. EPA approved test method, with prior approval from the Ohio EPA.

d. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) of the incinerator(s) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10.

e. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

f. 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).

g. Personnel from the Ohio EPA Northeast District Office 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.

h. 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C), and OAC rule 3745-77-07(C)(1)]

10. Requirements for AC-12 Fm Inc SO_2 emissions

a) Applicable Emissions Limitations and/or Control Requirements per OAC rule 3745-31-05(F)

(1) The total allowable SO_2 emissions for the incinerator system for any hour shall be the sum of the individual allowable SO_2 emissions limitations for those emissions units that are in operation during any part of that hour. The total allowable SO_2 emission rate from the emissions units vented to the incinerator system for any rolling, 3-hour period shall be the average of the three 1-hour allowables comprising the 3-hour period. A summary of the individual allowable SO_2 emission limitations:

P006	26.99 lbs/hr
P012	160.0 lbs/hr
P013	25.0 lbs/hr
P014	10.0 lbs/hr
P022	20.0 lbs/hr
P029	68.80 lbs/hr
P030	30.0 lbs/hr
P052	21.05 lbs/hr

[Authority for term: OAC rule 3745-31-05(F) based upon OAC rules 3745-18-06(E) and 3745-18-49]

(2) The total annual SO_2 emissions from AC-12 Fm Inc shall not exceed 100 tons per year.

[Authority for term: OAC rule 3745-31-05(F)]

b) Monitoring and Recordkeeping Requirements

(1) The permittee shall maintain hourly records of the following information:

a. the actual SO_2 emission rate from the incinerator system, in pounds per hour;

b. the rolling, 3-hour average, actual SO_2 emission rate from the incinerator system, in pounds per hour;

c. the total allowable SO_2 emission rate, in pounds per hour, for all the emissions units (P006, P012, P013, P014, P022, P029, P030, and P052) in operation during the hour; and

d. the rolling, 3-hour average, allowable SO_2 emission rate, in pounds per hour.

The permittee shall maintain records that document which emissions units (P006, P012, P013, P014, P022, P029, P030, and P052) were in operation during each hour. If an emissions unit is in operation during any portion of an hour, it is considered to be in operation for the entire hour for purposes of determining compliance with the total allowable SO_2 emission rate for all the emissions units in operation during any hour. Compliance shall be determined by comparing the rolling, 3-hour average, actual and allowable, SO_2 emission rates for each hour.

[Authority for term: OAC rule 3745-77-07(C)(1) and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000]

(2) The permittee shall maintain daily records of the actual SO_2 emission rate from the fume incinerator system, in pounds per day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The permittee shall operate and maintain existing equipment to continuously monitor and record SO_2 from these emissions units, in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13(d)(1), (e)(2) and (h), respectively. The permittee may request alternative monitoring procedures or requirements and alternative relative accuracy test procedures, in accordance with the relevant provisions of 40 CFR Parts 60.13(i) and (j), by submitting a written request to the Director. Any alternative monitoring and/or testing acceptable to the Director shall be approved by the U.S. EPA as a revision to the State Implementation Plan (SIP) prior to the implementation of the alternative monitoring and/or testing.

A statement of certification of the existing continuous SO_2 monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60,

Appendix B, Performance Specification 6. Proof of Certification shall be made available to the Director (the Ohio EPA Northeast District Office) upon request.

The permittee shall maintain records of all data obtained by the continuous SO_2 monitoring system including, but not limited to, parts per million SO_2 on an instantaneous (1-minute) basis, emissions of SO_2 in units of lbs/hr and lbs/hr rolling, 3-hour average, and in the appropriate averaging period (e.g., hourly and hourly rolling of consecutive 3-hour periods), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60.13, and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000]

(4) The permittee shall implement a quality assurance/quality control plan for the continuous SO_2 monitoring system designed to ensure continuous valid and representative readings of SO_2 emission concentrations and exhaust gas flow rates. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and include provisions for conducting a relative accuracy test following each monitor probe replacement. The relative accuracy test shall be performed, and the monitoring system operated, in accordance with the procedures specified in Performance Specification Tests 2 and 6, 40 CFR Part 60, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours. Each record of any monitoring data, testing data, and support information required shall be retained for a period of five years from the date the record was created. Support information shall include, but not limited to, all calibration and maintenance records and all electronic data for continuous monitoring instrumentation.

[Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60.13, and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000]

c) Reporting Requirements

(1) The permittee shall submit quarterly reports, for the preceding calendar quarter, that specify the total SO_2 emissions (in tons) from emissions units P006, P012, P013, P014, P022, P029, P030, and P052, combined, (as determined by record keeping required under B.10.b).

[Authority for term: OAC rule 3745-77-07(C)(1), and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000]

(2) Pursuant to OAC rule 3745-15-04, ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit quarterly deviation (excursion) reports that identify all rolling, three-hour periods during which the average SO_2 emission rate exceeded the corresponding total allowable SO_2 emission rate for the incinerator system.

The permittee shall submit quarterly reports documenting any downtime of the SO_2 continuous emission rate monitoring system and/or control equipment while any of the emissions units were on line. The permittee shall provide the date, time, duration, reason

(if known), an estimate of excess emissions, and any corrective action(s) taken for each such incident. Normal downtimes for daily calibration and zero checks or periods where monitoring is maintained by a backup analyzer when the primary analyzer malfunctions shall not be reportable.

If no deviations occurred during a calendar year, the permittee shall submit a quarterly report that states that no deviations occurred during that quarter. These reports shall also contain the total SO_2 emissions for the calendar quarter (in tons).

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1), 40 CFR Part 60.13, and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000]

d) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section B.10.a) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The total allowable SO_2 emissions for the fume incinerator system for any hour shall be the sum of the individual allowable SO_2 emissions limitations for those emissions units that are in operation during any part of that hour. The total allowable SO_2 emission rate from the emissions units vented to fume incinerator system for any rolling, 3-hour period shall be the average of the three 1-hour allowables comprising the 3-hour period. A summary of the individual allowable SO_2 emission limitations:

P006 26.99 lbs/hr

P012 160.0 lbs/hr

P013 25.0 lbs/hr

P014 10.0 lbs/hr

P022 20.0 lbs/hr

P029 68.80 lbs/hr

P030 30.0 lbs/hr

P052 21.05 lbs/hr

Applicable Compliance Method:

Compliance shall be demonstrated by the records of data obtained by the continuous SO_2 monitoring system, as required in B.10.b).

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 or 6C and OAC rule 3745-18-04(A), or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

b. Emission Limitation:

The total annual SO_2 emissions from AC-12 Fm Inc shall not exceed 100 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by the records of data obtained by the continuous SO_2 monitoring system, as required in B.10.b).

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 or 6C and OAC rule 3745-18-04(A), or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

11. Requirement for the operation of F-4 Flare, S-4 Flare, U-5 Flare, and Z-10 Flare required by OAC rule 3745-21-09(LL)

a) Monitoring and Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the flare. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

At any time the permittee observes visible emissions from the flare, the permittee shall monitor the visible emissions for a minimum period of 10 minutes in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and record the results in an operations log.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that:

a. identify all days during which any visible particulate emissions were observed from the flare when the emissions unit is in operation and the process vent stream is vented to the flare;

b. describe any corrective actions taken to eliminate the visible particulate emissions; and

c. include all visible emission readings conducted pursuant to the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 as a result of the presence of visible emissions from the flare.

[Authority for term: OAC rule 3745-77-07(C)(1)]

12. Requirements for the operation of carbon adsorbers M-7 CDrum, O-1 CDrum, P-3 CDrum, U-7 CDrum U-8 CDrum and W-1 CDrum

a) Monitoring and Recordkeeping Requirements

(1) If the control efficiency of the carbon adsorber is always assumed to be zero, and compliance with the emission limitation of 5 tons per rolling, 12-month period from all process vent streams not controlled by an incinerator or flare is demonstrated by the required record keeping, then the carbon adsorber is not subject to the requirements specified in B.12.a)(2), B.12.a)(3) and B.12.a)(4).

Pursuant to OAC rule 3745-21-09(LL)(3)(a), if the emission limitation of 5 tons per rolling, 12-month period has been exceeded when assuming the control efficiency of the carbon adsorber is always zero, then the permittee shall comply with the requirements of OAC rule 3745-21-09(LL)(1), as well as all monitoring, record keeping, reporting, and testing requirements specified in the terms and conditions for the carbon adsorber.

[Authority for term: OAC rule 3745-21-09(LL)(1) and OAC rule 3745-77-07(C)(1)]

(2) The carbon adsorber shall be continuously maintained to ensure that the existing carbon is replaced with fresh carbon immediately when breakthrough is indicated.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The permittee shall monitor and record the concentration level of the organic compounds in the carbon adsorber's exhaust stream daily, or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(4) The permittee shall monitor and record all periods when carbon breakthrough is detected. Existing carbon shall be replaced with fresh carbon immediately upon carbon breakthrough. As an alternative, the permittee shall replace the carbon with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval, as determined by the maximum design flow rate and the organic concentration in the gas stream.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b) Reporting Requirements

(1) Unless the control efficiency of the carbon adsorber is assumed to be zero, the permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment when the emissions unit is in operation and the process vent stream is vented to the carbon adsorber:

a. all periods during which the existing carbon is not replaced with fresh carbon immediately when breakthrough is indicated.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for each carbon adsorber in accordance with the following requirements unless the control efficiency is assumed to be zero:

a. The emission testing shall be conducted within 2.5 years of issuance of the permit (If the control efficiency is assume to be zero and subsequently the control efficiency is required to comply with the 5 tons of VOC per rolling, 12-month period, then the emissions testing shall be conducted 90 days after such determination.).

b. The emission testing for the carbon adsorber shall be conducted to determine the control efficiency.

c. 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.

d. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

e. 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).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10, and OAC rule 3745-77-07(C)(1)]

13. Requirements for the operation of packed bed wet scrubber, P-2 WScrb

a) Monitoring and Recordkeeping Requirements

(1) If the control efficiency of the P-2 WScrb is always assumed to be zero, and compliance with the emission limitation of five tons per rolling twelve-month period from all process vent streams not controlled by an incinerator or a flare is demonstrated by the required record keeping, then the scrubber is not subject to the requirements specified in B.13.a)(2), B.13.a)(3), B.13.a)(4), B.13.a)(5) and B.13.a)(6).

Pursuant to OAC rule 3745-21-09(LL)(3)(a), if the emission limitation of 5 tons per rolling, 12-month period has been exceeded when assuming the control efficiency of the scrubber is always zero, then the permittee shall comply with the requirements of OAC rule 3745-21-09(LL)(1), as well as all monitoring, record keeping, reporting and testing requirements specified in the terms and conditions for the scrubber.

[Authority for term: OAC rule 3745-21-09(LL)(1) and OAC rule 3745-77-07(C)(1)]

(2) The acceptable liquid flow rate for P-2 WScrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber, is not less than 2 gallons per minute.

This operating limitation is effective for the duration of this permit. Any changes in the acceptable level must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the level based upon information obtained during future VOC emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the level will not

constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The permittee shall properly operate and maintain equipment to continuously monitor and record the scrubber liquid flow rate, in gallons per minute, at all times when the emissions unit is in operation and the process vent stream is vented to the scrubber, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(4) The permittee shall record the following information each day when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. the scrubber liquid flow rate, in gallons per minute.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) Whenever the flow rate deviates from the operating limitation, while the emissions unit is in operation and the process vent stream is vented to the scrubber, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment above the acceptable operating limitation, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

(7) The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the flow rate immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b) Reporting Requirements

(1) Unless the control efficiency of P-2 WScrb is assumed to be zero, the permittee shall submit quarterly deviations (excursion) reports that identify the following information concerning the operation of the control equipment when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. each period of time when the scrubber liquid flow rate was less than the operating limitation;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber liquid flow rate into compliance with the acceptable value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements for P-2 WScrb (unless the control efficiency is assumed to be zero):

a. The emission testing shall be conducted within 2.5 years of issuance of the permit.

b. The emission testing shall be conducted to determine the control efficiency of P-2 WScrb.

c. 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.

d. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

e. 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).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10, and OAC rule 3745-77-07(C)(1)]

14. Insignificant Emissions units

The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21 and 3745-31 or in 40 CFR Part 60 or 40 CFR Part 63:

IEU	Process Description	Applicable Requirement
G001	Gasoline Storage and Dispensing	PBR08288
G002	Diesel Storage and Dispensing	PBR08289
B015	Onan 315 HP Kw emergency electrical generator	PBR01160 and 40 CFR 63, Subpart ZZZZ

B016	Onan 45 Kw emergency electrical generator	PBR01161 and 40 CFR 63, Subpart ZZZZ
B017	Onan 45 Kw emergency electrical generator	PBR01162 and 40 CFR 63, Subpart ZZZZ
B018	Onan 67 Kw emergency electrical generator	PBR01163 and 40 CFR 63, Subpart ZZZZ
B019	Onan 20 Kw emergency electrical generator	PBR01164 and 40 CFR 63, Subpart ZZZZ
B020	Onan 67 Kw emergency electrical generator	PBR01165 and 40 CFR 63, Subpart ZZZZ
B021	Onan 30 Kw emergency electrical generator	PBR01166 and 40 CFR 63, Subpart ZZZZ
B022	GM 185 HP firefighting water pump	PBR01167 and 40 CFR 63, Subpart ZZZZ
P076	1500 KW back-up emergency generator (Caterpillar 3512C diesel)	PBR07392 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ
P077	1500 KW back-up emergency generator (caterpillar 3512C diesel)	PBR07393 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ
P080	Boiler House 465 HP emergency diesel generator engine	PBR08205 and 40 CFR 63, Subpart ZZZZ
P081	Building 12/Fume Incinerator 200 kW diesel emergency generator engine	PBR08206 and 40 CFR 63, Subpart ZZZZ
P123	282 HP Diesel Emergency Fire Water Pump	PBR08807 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ

C. Emissions Unit Terms and Conditions

1. B001, Steam Boiler #1

Operations, Property and/or Equipment Description:

Natural gas or #2 fuel oil fired boiler rated 41 mmBtu/hr

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	See b)(2)a.
b.	OAC rule 3745-17-10(B)(1)	See b)(2)b.
c.	OAC rule 3745-18-49(B)(1)	See b)(2)c.
d.	OAC rule 3745-110-03(A)	See b)(2)d.

(2) Additional Terms and Conditions

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

b. Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

c. Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of actual heat input on days number two fuel oil is burned. Pursuant to OAC rule 3745-18-06(A), the emissions unit is exempt from the emission limit in this rule during any calendar day in which natural gas is the only fuel burned.

This emission unit is an existing small boiler according to OAC rule 3745-110-02(A)(1) and subject to annual tuning.

c) Operational Restrictions

(1) The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit. Liquid fuel shall only be burned during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

[Authority for term: OAC rule 3745-77-07(A)(1)]

(2) The quality of the oil burned in this emissions unit shall have sulfur and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds of sulfur dioxide per million Btu of actual heat input.

Compliance with this emission limit is met if number two fuel oil is burned.

d) [Authority for term: OAC rule 3745-77-07(A)(1)] Monitoring and/or Recordkeeping 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain records that demonstrate that the oil being burned is number two fuel oil.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-18-04(E)(3), and OAC rule 3745-18-04(F)]

(3) The permittee shall annually perform a tune-up and maintain, in a permanently bound log book or other format approved in writing by the director, the following information:

a. the date of the last tune-up;

b. the name, title and affiliation of the person who performed the tune-up and made any adjustments; and

c. the adjustments made to the boiler during the tune-up.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-110-03(A)]

e) Reporting Requirements

(1) The permittee shall submit quarterly 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedance of the SO_2 emission limit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, and OAC rule 3745-17-03(B)(1) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

b. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.3, Table 1.3-1 (5/10) or most recent version for number 2 fuel oil combustion and the maximum input capacity of the burners.

$$E(PM) = EF / H$$

where:

E(PM) = PM emission rate, in lb/mmBtu;

EF = emission factor, i.e., 2 lbs PM/1000 gal from AP-42 (5/10); and

H = heat content of the fuel, in mmBtu/gal, i.e., 140 mmBtu/1000 gal from AP-42 (5/10).

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, and OAC rule 3745-17-03(B)(9) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of actual heat input on days number two fuel oil is burned.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2).

If required, the following equation specified in OAC rule 3745-18-04(F)(2) shall be used to demonstrate compliance:

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

where:

E = SO_2 emission rate, in lbs/mmBtu;

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

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

S = decimal fraction of sulfur in the liquid fuel.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(E)]

(2) If required, the permittee shall conduct, or have conducted, SO_2 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 SO_2 shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 or 6C 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(E)]

g) Miscellaneous Requirements

(1) None.

2. B002, Steam Boiler #2

Operations, Property and/or Equipment Description:

Natural gas or #2 fuel oil fired boiler rated 41 mmBtu/hr.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	See b)(2)a.
b.	OAC rule 3745-17-10(B)(1)	See b)(2)b.
c.	OAC rule 3745-18-49(B)(1)	See b)(2)c.
d.	OAC rule 3745-110-03(A)	See b)(2)d.

(2) Additional Terms and Conditions

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

b. Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

c. Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of actual heat input on days number two fuel oil is burned. Pursuant to OAC rule 3745-18-06(A), the emissions unit is exempt from the emission limit in this rule during any calendar day in which natural gas is the only fuel burned.

d. This emissions unit is an existing small boiler according to OAC rule 3745-110-02(A)(1) and subject to annual tuning.

c) Operational Restrictions

(1) The permittee shall burn only natural gas and/or number two fuel oil in this emissions unit. Liquid fuel shall only be burned during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

[Authority for term: OAC rule 3745-77-07(A)(1)]

(2) The quality of the oil burned in this emissions unit shall have a sulfur and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds of sulfur dioxide per million Btu of actual heat input.

Compliance with this emission limit is met if number two fuel oil is burned.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain records that demonstrate that the oil being burned is #2 fuel oil.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-18-04(E)(3), and OAC rule 3745-18-04(F)]

(3) The permittee shall annually perform a tune-up and maintain, in a permanently bound log book or other format approved in writing by the director, the following information:

a. the date of the last tune-up;

b. the name, title and affiliation of the person who performed the tune-up and made any adjustments; and

c. the adjustments made to the boiler during the tune-up.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-110-03(A)]

e) Reporting Requirements

(1) The permittee shall submit quarterly 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedance of the SO_2 emission limit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

b. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.3, Table 1.3-1 (5/10) or most recent version for number 2 fuel oil combustion and the maximum input capacity of the burners.

$$E(PM) = EF / H$$

where:

E(PM) = PM emission rate, in lb/mmBtu;

EF = emission factor, i.e., 2 lbs PM/1000 gal from AP-42 (5/10); and

H = heat content of the fuel, in mmBtu/gal, i.e., 140 mmBtu/1000 gal from AP-42 (5/10).

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR

Part 60, Appendix A, Methods 1 through 5, and OAC rule 3745-17-03(B)(9) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of actual heat input on days number two fuel oil is burned.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2).

If required, the following equation specified in OAC rule 3745-18-04(F)(2) shall be used to demonstrate compliance:

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

where:

E = SO_2 emission rate, in lbs/mmBtu;

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

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

S = decimal fraction of sulfur in the liquid fuel.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(E)]

(2) If required, the permittee shall conduct, or have conducted, SO_2 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 SO_2 shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 or 6Cand 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(E)]

g) Miscellaneous Requirements

(1) None.

3. B003, Steam Boiler #3

Operations, Property and/or Equipment Description:

Natural gas or number two fuel oil-fired boiler rated 41 mmBtu/hr.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0117389)	Nitrogen oxides (NO_x) emissions shall not exceed 9.27 lbs/hr and 40.6 tpy. Carbon monoxide (CO) emissions shall not exceed 3.44 lbs/hr and 15.1 tpy. Sulfur dioxide (SO_2) emissions shall not exceed 65.6 lbs/hr and 287 tpy. The requirements of this rule also include the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-10(B)(1) and OAC rule 3745-18-06(D).
b.	OAC rule 3745-17-07(A)(1)	See b)(2)a.
c.	OAC rule 3745-17-10(B)(1)	See b)(2)b.
d.	OAC rule 3745-18-49(B)(1)	See b)(2)c.
e.	OAC rule 3745-110-03(A)	See b)(2)d.

(2) Additional Terms and Conditions

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

b. Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

c. Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of actual heat input on days number two fuel oil is burned. Pursuant to OAC rule 3745-18-

06(A), the emissions unit is exempt from the emission limit in this rule during any calendar day in which natural gas is the only fuel burned.

d. This emissions unit is an existing small boiler according to OAC rule 3745-110-02(A)(1) and subject to annual tuning.

c) Operational Restrictions

(1) The permittee shall burn only natural gas and/or number 2 fuel oil in this emissions unit.

[Authority for term: P0117389 and OAC rule 3745-77-07(A)(1)]

(2) The quality of the oil burned in this emissions unit shall have sulfur and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds of sulfur dioxide per million Btu of actual heat input.

Compliance with this emission limit is met if number two fuel oil is burned.

[Authority for term: P0117389 and OAC rule 3745-77-07(A)(1)]

(3) Liquid fuel shall only be burned during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records that demonstrate that the oil being burned is number two fuel oil.

[Authority for term: P0117389, OAC rule 3745-77-07(C)(1), OAC rule 3745-18-04(E)(3), and OAC rule 3745-18-04(F)]

(2) The permittee shall maintain annual records of the amount of natural gas and number 2 fuel oil used by this emissions unit (in standard cubic feet or gallons).

[Authority for term: P0117389 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall annually perform a tune-up and maintain, in a permanently bound log book or other format approved in writing by the director, the following information:

a. the date of the last tune-up;

b. the name, title and affiliation of the person who performed the tune-up and made any adjustments; and

c. the adjustments made to the boiler during the tune-up.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-110-03(A)]

e) Reporting Requirements

(1) The permittee shall submit quarterly 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.

[Authority for term: P0117389 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedance of the SO_2 emission limit.

[Authority for term: P0117389 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: P0117389, OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

b. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.3, Table 1.3-1 (5/10) or most recent version for number 2 fuel oil combustion and the maximum input capacity of the burners.

$$E(PM) = EF / H$$

where:

E(PM) = PM emission rate, in lb/mmBtu;

EF = emission factor, i.e., 2 lbs PM/1000 gal from AP-42 (5/10); and

H = heat content of the fuel, in mmBtu/gal, i.e., 140 mmBtu/1000 gal from AP-42 (5/10).

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, and OAC rule 3745-17-03(B)(9) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: P0117389, OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6 pounds per million Btu of actual heat input on days number two fuel oil is burned.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1), using the following equation specified in OAC rule 3745-18-04(F)(2) for each shipment of number 2 fuel oil:

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

where:

E = SO_2 emission rate, in lb/mmBtu;

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

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

S = decimal fraction of sulfur in the liquid fuel.

[Authority for term: P0117389, OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(E)]

d. Emission Limitation:

SO_2 emissions shall not exceed 65.6 lbs/hr and 287 tpy.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be determined by multiplying the pound per mmBtu emission limitation (1.6 lb/mmBtu) by the maximum heat input of the burners (41 mmBtu/hr). Therefore, if compliance is shown with the pound per mmBtu allowable emission limitation, compliance is demonstrated with the hourly emission limitation.

The annual emission limitation was developed by multiplying the short-term allowable SO_2 limitation (65.6 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: P0117389, OAC rule 3745-15-04(C), OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

NO_x emissions shall not exceed 9.27 lbs/hr and 40.6 tpy.

Applicable Compliance Method:

Compliance with the short term emission limit shall be based on a one time calculation by using emission factors from AP-42, Section 1.3, Table 1.3-1 (5/10) or most recent version for number 2 fuel oil combustion and the maximum input capacity of the burners.

$E(NO_x) = (41 \text{ mmBtu/hr}) \times EF / H$

where:

$E(NO_x)$ = NO_x emission rate, in lb/hr;

41 mmBtu/hr is the maximum heat input of the burners;

EF = emission factor, i.e., 20 lbs NO_x/1000 gal from AP-42 (5/10); and

H = heat content of the fuel, in Btu/gal, i.e., 140 mmBtu/1000 gal from AP-42 (5/10).

If required, compliance shall be demonstrated based upon emission testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the short-term allowable NO_x limitation (9.27 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: P0117389, OAC rule 3745-15-04(C), OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

CO emissions shall not exceed 3.44 lbs/hr and 15.1 tpy.

Applicable Compliance Method:

Compliance with the short term emission limit shall be based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-1 (7/98) or most recent version for natural gas combustion and the maximum input capacity of the burners.

E(CO) = (41 mmBtu/hr) x EF / H

where:

E(CO) = CO emission rate, in lb/hour;

41 mmBtu/hr is the maximum heat input of the burners;

EF = emission factor, i.e., 84 lbs CO/mmSCF from AP-42 (7/98); and

H = heat content of the fuel in Btu/scf, i.e., 1000 Btu/scf from AP-42 (7/98).

If required, compliance shall be demonstrated based upon emission testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the short-term allowable CO limitation (3.44 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: P0117389, OAC rule 3745-15-04(C), OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

4. B004, Steam Boiler #4

Operations, Property and/or Equipment Description:

Natural gas fired boiler rated at 81 mmBtu/hr.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-862 (effective 11/30/1981)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A), 3745-17-10(B)(1) and 3745-18-06(D).
b.	OAC rule 3745-17-07(A)	See b)(2)a.
c.	OAC rule 3745-17-10(B)(1)	See b)(2)b.
d.	OAC rule 3745-18-49(B)(1)	See b)(2)c.
e.	OAC rule 3745-110-03(B)	See b)(2)d.

(2) Additional Terms and Conditions

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

b. Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

c. Pursuant to OAC rule 3745-18-06(A), this emissions unit is exempt from the emission limitation in this rule during any calendar day in which natural gas is the only fuel burned.

d. Nitrogen oxides (NO_x) emissions shall not exceed 0.10 lb/mmBtu while burning natural gas.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

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

<u>Applicable Compliance Method</u>:

If required, compliance shall be demonstrated based upon visible emissions observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, and OAC rule 3745-17-03(B)(1) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

b. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-2 (7/98) or most recent version for natural gas oil combustion and the maximum input capacity of the burners.

E(PM) = EF / H

where:

E(PM) = PM emission rate, in lb/mmBtu;

EF = emission factor, i.e., 1.9 lbs filterable PM/mmSCF from AP-42 (7/98); and

H = heat content of the fuel, in Btu/scf, i.e., 1000 mmBtu/mmBtu/SCF from AP-42 (7/98).

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(9) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

Nitrogen oxides (NO_x) emissions shall not exceed 0.10 lb/mmBtu while burning natural gas.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by stack testing in accordance with f)(2).

(2) 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 2.5 years after permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the NO_x emission rate, in lb/mmBtu.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for NO_x – Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

e. 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).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-110-05, and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

5. B009, Steam Boiler #7

Operations, Property and/or Equipment Description:

Natural gas fired boiler rated 18 mmBtu/hr.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-18165 (effective 7/31/2003)	Nitrogen oxides (NO_x) emissions shall not exceed 1.76 lbs/hr and 7.73 tpy. Carbon monoxide (CO) emissions shall not exceed 1.48 lbs/hr and 6.49 tpy. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and OAC rule 3745-17-10(B)(1).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

(2) Additional Terms and Conditions

a. None

c) Operational Restrictions

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

[Authority for term: PTI 02-18165 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) 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.

[Authority for term: PTI 02-18165 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain annual records of the amount of natural gas used by this emissions unit in standard cubic feet (scf).

[Authority for term: PTI 02-18165 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

[Authority for term: PTI 02-18165 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit an annual report that summarizes the following information:

a. the annual amount of natural gas used in this emissions unit, in scf; and

b. the total annual emissions of NO_x, CO and particulate emissions from this emissions unit for the previous calendar year.

This report shall be submitted by January 31 of each year for operations during the previous calendar year. Alternatively, this reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: PTI 02-18165 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

NO_x emissions shall not exceed 1.76 lbs/hr and 7.73 tpy.

Applicable Compliance Method:

Compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (7/98) for natural gas combustion and the maximum input capacity of the gas burners.

$E(NO_x)$ = (18 mm Btu/hr) x [(100 lbs/mmscf)/(1,020 Btu/scf)] = 1.76 lbs/hr

The annual emission limitation was developed by multiplying the short-term allowable NO_x limitation (1.76 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: PTI 02-18165 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

CO emissions shall not exceed 1.48 lbs/hr and 6.49 tpy.

Applicable Compliance Method:

Compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (7/98) for natural gas combustion and the maximum input capacity of the gas burners.

E(CO) = (18 mm Btu/hr) x [(84 lbs/mmscf)/(1,020 Btu/scf)] = 1.48 lbs/hr

The annual emission limitation was developed by multiplying the short-term allowable CO limitation (1.48 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: PTI 02-18165 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-18165, OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

d. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be based on a one time calculation by using emission factors from AP-42, Section 1.4, Table 1.4-2 (7/98) or most recent version for natural gas combustion and the maximum input capacity of the burners.

E(PM) = EF / H

where:

E(PM) = PM emission rate, in lb/mmBtu;

EF = emission factor, i.e., 1.9 lbs filterable PM/mmSCF from AP-42 (7/98); and

H = heat content of the fuel, in Btu/scf, i.e., 1000 mmBtu/mmSCF from AP-42 (7/98).

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(9) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-18165, OAC rule 3745-15-04(A), OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(9)]

g) Miscellaneous Requirements

(1) None.

6. N001, Waste Incinerator

Operations, Property and/or Equipment Description:

Waste Heat Recovery Incinerator with a rated capacity of 5,500 lbs/hr.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-09	Particulate emissions shall not exceed 0.10 pound per one hundred pounds of liquid, semi-solid or solid refuse and salvageable material charged.
c.	OAC rule 3745-18-49(B)(12)	Sulfur dioxide (SO_2) emissions shall not exceed 100 lbs/hr.
d.	40 CFR Part 63, Subpart EEE (MACT for Hazardous Waste Combustors)	See b)(2)a through b)(2)e, c)(1) through c)(5), d)(1) through d)(10), e)(1) through e)(19), f)(2) and f)(4).
e.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	Pursuant to 40 CFR 64.2(b)(1)(i), CAM does not apply to the PM emissions regulated by MACT emissionlimitations. The CAM requirements of 40 CFR Part 64 apply to the SO_2 emissions controlled by the WHRI CScrb. See b)(2)f.

(2) Additional Terms and Conditions

a. 40 CFR 63.1203(a): Emission Standards and Operating Limits for Hazardous Waste Incinerators.

The permittee shall comply with the following operating limits, or as established in the most recent Document of Compliance or Notification of Compliance, whichever are currently applicable:

i. Emissions of metals shall be controlled by limiting their feed rates as follows:

(a) The feed rate of mercury shall not exceed 0.0014 pound per hour as a rolling, 12-hour average.

(b) The feed rate of semi volatile metals (Pb and Cd) combined shall not exceed 0.42 pound per hour as a rolling, 12-hour average.

(c) The feed rate of low volatile metals (As, Be, and Cr) combined shall not exceed 0.79 pound per hour as a rolling, 12-hour average.

ii. Other pollutants shall be controlled as follows:

(a) The feed rate of chlorine shall not exceed 31 pounds per hour as a rolling, 12-hour average.

(b) The total ash feed rate shall not exceed 1,012 pounds per hour as a rolling, 12-hour average.

b. 40 CFR 63.1203(a):

The permittee shall comply with the following emission limits, or as established in the final rule after its compliance date, whichever are currently applicable:

i. Emission limits for existing sources. You must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(a) For dioxins and furans: Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen.

(b) Mercury in excess of 130 ug/dscm corrected to 7 percent oxygen.

(c) Lead and cadmium in excess of 240 ug/dscm* combined emissions per the interim standard, corrected to 7 percent oxygen (*expected to change to 230 ug/dscm in the final MACT standard, unless otherwise specified in the latest revision to the MACT).

(d) Arsenic, beryllium, and chromium in excess of 97 ug/dscm* combined emissions per the interim standard, corrected to 7 percent oxygen (*expected to change to 92 ug/dscm in the final MACT standard, unless otherwise specified in the latest revision to the MACT).

(e) For carbon monoxide:

(i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If the permittee elects to comply with this carbon monoxide standard rather than the hydrocarbon standard under paragraph (a)(5)(ii) of 63.1203, the permittee must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by 63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane.

(f) Hydrochloric acid and chlorine gas in excess of 77 parts per million* by volume, combined emissions per the interim standard, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen (*expected to change to 32 parts per million in the final MACT standard, unless otherwise specified in the latest revision to the MACT).

(g) Particulate matter in excess of 34 mg/dscm* corrected to 7 percent oxygen per the interim standard (*expected to change to 0.013 gr/dscf in the final MACT standard, unless otherwise specified in the latest revision to the MACT).

c. 40 CFR 63.1203(c): The permittee shall comply with the following emission limits, or as established in the final rule after its compliance date, whichever are currently applicable:

i. The permittee must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC) designated under paragraph (c)(3) of 63.1203. The permittee must calculate DRE for each POHC from the following equation:

$$DRE = [1 - (W_{out} / W_{in})] * 100\%$$

where:

W_{in} = mass feedrate of one POHC in a waste feedstream; and

W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

d. 40 CFR 63.1206(b): Compliance with standards.

The emission standards and operating requirements set forth in this subpart apply at all times except:

i. during periods of startup, shutdown, and malfunction; and

ii. when hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cut off for a period of time not less than the hazardous waste residence time) and the permittee has documented in the operating record that the permittee is complying with all otherwise applicable requirements and standards promulgated under authority of sections 112 or 129 of the Clean Air Act in lieu of the emission standards of 63.1203 through 63.1205; the monitoring and compliance standards of this section and 63.1207 through 63.1209, except the modes of operation requirements of 63.1209(q); and the notification, reporting, and record keeping requirements of 63.1210 through 63.1212.

e. 40 CFR 63.1209(q): Operating under different modes of operation.

Operating under otherwise applicable standards after the hazardous waste residence time has transpired. As provided by 63.1206(b)(1)(ii), the permittee may operate under otherwise applicable requirements promulgated under sections 112 and 129 of the Clean Air Act in lieu of the substantive requirements of 40 CFR Part 63, Subpart EEE. Specifically, when operating in the "warm stand-by maintenance mode" as documented in the Operating and Maintenance Plan, only the following otherwise applicable requirements apply:

i. OAC rule 3745-17-07(A), OAC rule 3745-17-09, and OAC rule 3745-18-49(B)(12) per b)(1) above pertaining to PE and SO_2 limits.

f. This emissions unit is a pollutant specific emissions unit for SO_2 according to 40 CFR Part 64 and has developed a CAM plan.

Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a CAM plan for emissions unit N001. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions unit.

c) Operational Restrictions

(1) 40 CFR Part 63, Subpart EEE:

The permittee shall comply with the following operating limits, or as established in the most recent Document of Compliance or Notification of Compliance, whichever are currently applicable:

a. The pressure drop across the baghouse shall be maintained not to exceed 8 inches of water as an hourly rolling average while burning waste.

b. The permittee shall operate and maintain the wet scrubber at all times the process vent stream is vented to the scrubber, and burning waste in accordance with the following parameters:

   i. the pH of the scrubber liquid shall be maintained at or above 4.0 as an hourly rolling average;

   ii. the liquid-to-gas ratio shall be maintained at or above 4 gallons per 1,000 actual cubic feet as an hourly rolling average;

   iii. the pressure drop across the scrubber shall be maintained at a value of greater than or equal to 3.5 inches of water as an hourly rolling average; and

   iv. the blowdown rate for the scrubber shall be maintained above 1.33 gallons per minute as an hourly rolling average.

c. The permittee shall maintain the combustion hearth at the following conditions while burning waste:

   i. the hearth flue gas temperature shall be maintained at or above 1369 degrees F as an hourly rolling average; and

   ii. the hearth pressure shall be maintained below 0.0 inches of water with a 5-second delay.

d. The permittee shall maintain the secondary combustion chamber gas temperature at or above 1,657 degrees F as an hourly rolling average while burning waste.

e. The permittee shall minimize baghouse leaks as follows:

   i. the permittee shall maintain an indicator to detect baghouse leaks, and not have a 100 percent indication for more than 30 minutes while burning waste; and

   ii. the temperature of the baghouse inlet gas shall not exceed 481 degrees F as an hourly rolling average while burning waste.

f. The permittee shall maintain waste feed rates as follows:

   i. the pumpable waste feed rate shall be maintained below 5,156 pounds per hour as an hourly rolling average; and

   ii. the total waste feed rate shall be maintained below 5,192 pounds per hour as an hourly rolling average.

g. The permittee shall maintain combustion gas flow rates (stack gas flow rates) as follows while burning waste:

i. the maximum combustion gas flow rate shall be maintained below 14,347 acfm as an hourly rolling average; and

ii. the minimum combustion gas flow rate shall be maintained above 7,738 acfm (as a rolling, 12-hour average).

h. The permittee shall maintain the combustion air pressure at or above 20" water column on an instantaneous basis at all times while feeding liquid waste.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(A)(1)]

(2) 40 CFR 63.1206(c)(2)(v): Operating under the startup, shutdown, and malfunction plan.

Compliance with AWFCO requirements during malfunctions:

a. During malfunctions, the automatic waste feed cutoff requirements of 63.1206(c)(3) continue to apply, except for paragraphs (c)(3)(v) and (c)(3)(vi) of 63.1206. If the permittee exceeds a 40 CFR Part 63, Subpart EEE, emission standard monitored by a CEMS or COMS or operating limit specified under 63.1209, the automatic waste feed cutoff system must immediately and automatically cutoff the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of 63.1206. If the malfunction itself prevents immediate and automatic cutoff of the hazardous waste feed, however, the permittee must cease feeding hazardous waste as quickly as possible.

b. Although the automatic waste feed cutoff requirements continue to apply during a malfunction, an exceedance of an emission standard monitored by a CEMS or COMS or operating limit specified under 63.1209 is not a violation of this subpart if the permittee takes the corrective measures prescribed in the startup, shutdown and malfunction plan.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(A)(1)]

(3) 40 CFR 63.1206(c)(3): Automatic waste feed cutoff (AWFCO).

a. General. Upon the compliance date, the permittee must operate the hazardous waste combustor with a functioning system that immediately and automatically cuts off the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of 63.1206:

i. When any of the following are exceeded: Operating parameter limits specified under 63.1209; an emission standard monitored by a CEMS; and the allowable combustion chamber pressure.

ii. When the span value of any CMS detector, except a CEMS, is met or exceeded.

iii. Upon malfunction of a CMS monitoring an operating parameter limit specified under 63.1209 or an emission level.

iv. When any component of the automatic waste feed cutoff system fails.

b. Ducting of combustion gases. During an AWFCO, the permittee must continue to duct combustion gasses to the air pollution control system while hazardous waste remains in the combustion chamber (i.e., if the hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated).

c. Restarting waste feed. The permittee must continue to monitor, during the cutoff, the operating parameters for which limits are established under 63.1209 and the emissions required under that section to be monitored by a CEMS, and the permittee must not restart the hazardous waste feed until the operating parameters and emission levels are within the specified limits.

d. Failure of the AWFCO system. If the AWFCO system fails to automatically and immediately cutoff the flow of hazardous waste upon exceedance of parameter required to be interlocked with the AWFCO system under paragraph (c)(3)(i) of 63.1206, the permittee has failed to comply with the AWFCO requirements of paragraph (c)(3) of 63.1206.

e. Corrective measures. If, after any AWFCO, there is an exceedance of an emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber (i.e., whether the hazardous waste residence time has transpired since the hazardous waste feed cutoff system was activated), the permittee must investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs, and record the findings and corrective measures in the operating record.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(A)(1)]

(4) 40 CFR 63.1206(c)(6): Operator training and certification.

a. The permittee must establish training programs for all categories of personnel whose activities may reasonably be expected to directly affect emissions of hazardous air pollutants from the source. Such persons include, but are not limited to, chief facility operators, control room operators, continuous monitoring system operators, persons that sample and analyze feedstreams, persons that manage and charge feedstreams to the combustor, persons that operate emission control devices, and ash and waste handlers. Each training program shall be of a technical level commensurate with the person's job duties specified in the training manual. Each commensurate training program shall require an examination to be administered by the instructor at the end of the training course. Passing of this test shall be deemed the "certification" for personnel, except that, for control room operators, the training and certification program shall be as specified in paragraphs (c)(6)(iii) through (c)(6)(vi) of 63.1206.

b. The permittee must ensure that the source is operated and maintained at all times by persons who are trained and certified to perform these and any other duties that may affect emissions of hazardous air pollutants. A certified control room operator must be on duty at the site at all times the source is in operation.

c. Hazardous waste incinerator control room operators must:

i. Be trained and certified under a site-specific, source-developed and implemented program that meets the requirements of paragraph (c)(6)(v) of 63.1206; or

ii. Be trained under the requirements of, and certified under, the American Society of Mechanical Engineers Standard Number QHO-1-1994 and QHO-1a-1996 Addenda [incorporated by reference-see 63.14(e)]. If the permittee chooses to use the ASME program:

(a) Control room operators must, prior to the compliance date, achieve provisional certification, and must submit an application to ASME and be scheduled for the full certification exam. Within one year of the compliance date, control room operators must achieve full certification;

(b) New operators and operators of new sources must, before assuming their duties, achieve provisional certification, and must submit an application to ASME, and be scheduled for the full certification exam. Within one year of assuming their duties, these operators must achieve full certification; or

iii. Be trained and certified under a State program.

d. Site-specific, source developed and implemented training programs for control room operators must include the following elements:

i. Training on the following subjects:

(a) environmental concerns, including types of emissions;

(b) basic combustion principles, including products of combustion;

(c) operation of the specific type of combustor used by the operator, including proper startup, waste firing, and shutdown procedures;

(d) combustion controls and continuous monitoring systems;

(e) operation of air pollution control equipment and factors affecting performance;

(f) inspection and maintenance of the combustor, continuous monitoring systems, and air pollution control devices;

(g) actions to correct malfunctions or conditions that may lead to malfunction;

(h) residue characteristics and handling procedures; and

(i) applicable Federal, state, and local regulations, including Occupational Safety and Health Administration workplace standards.

ii. An examination designed and administered by the instructor; and

iii. Written material covering the training course topics that may serve as reference material following completion of the course.

e. To maintain control room operator qualification under a site-specific, source developed and implemented training program as provided by paragraph (c)(6)(v) of 63.1206, control room operators must complete an annual review or refresher course covering, at a minimum, the following topics:

i. update of regulations;

ii. combustor operation, including startup and shutdown procedures, waste firing, and residue handling;

iii. inspection and maintenance;

iv. responses to malfunctions or conditions that may lead to malfunction; and

v. operating problems encountered by the operator.

f. The permittee must record the operator training and certification program in the operating record.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(A)(1)]

(5) 40 CFR 63.1206(c)(7): Operation and maintenance plan.

General.

a. The permittee must prepare and at all times operate according to an operation and maintenance plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustor, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.

b. The plan must prescribe how you will operate and maintain the combustor in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels achieved during the comprehensive performance test.

c. This plan ensures compliance with the operation and maintenance requirements of 63.6(e) and minimizes emissions of pollutants, automatic waste feed cutoffs, and malfunctions.

d. The permittee must record the plan in the operating record.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) 40 CFR 63, Subpart EEE: Monitoring and Compliance Provisions.

The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

The permittee shall record the following parameters for the baghouse while burning waste:

a. the leak indicator reading [per 63.1206(c)(7)(ii)];

b. baghouse inlet gas temperature (as an hourly rolling average) [per 63.1209(k)(1) & 1209(n)(1)]; and

c. the pressure drop across the baghouse (as an hourly rolling average) [per 63.1209(g)(2)].

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(2) 40 CFR 63, Subpart EEE: Monitoring and Compliance Provisions.

The permittee shall properly install, operate and maintain equipment to continuously monitor the scrubber liquor flow rate of the wet scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the folowing information while burning waste:

a. the pH of the scrubber liquor, (as an hourly rolling average) [per 63.1209(o)(3)(iv)];

b. the liquid-to-gas ratio, in gallons per 1000 cubic feet, (as an hourly rolling average) [per 63.1209(o)(3)(v)];

c. the pressure drop across the scrubber, (as an hourly rolling average) [per 63.1209(o)(3)(ii)];

d. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and

e. the scrubber blowdown rate gpm (as an hourly rolling average) [per 63.1209(m)(1)(i)(B)(1)(ii)].

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(3) 40 CFR 63.1209(a)(2) & (j)(4): Performance specifications.

The permittee shall install, calibrate, maintain, and continuously operate the CEMS and COMS in compliance with the quality assurance procedures provided in the appendix to Subpart EEE and Performance Specifications 4B (carbon monoxide and oxygen) in appendix B, part 60 of this chapter. Specifically, the permittee shall operate and maintain existing equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 63.1209(a)(2), (a)(3), (a)(6) and the Appendix to Subpart EEE.

A statement of certification of the existing continuous CO monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4B. Proof of certification shall be made available to the Director (the Ohio EPA Northeast District Office) upon request.

The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one-minute) basis, emissions of CO in units of ppm in the appropriate averaging period, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall implement a quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emission concentrations and exhaust gas flow rates. The plan shall follow the requirements of the Appendix to Subpart EEE and include provisions for conducting a relative accuracy test following each monitor probe replacement. The relative accuracy test shall be performed, and the monitoring system operated, in accordance with the procedures specified in Performance Specification 4B, 40 CFR Part 60, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours. Each record of any monitoring data, testing data, and support information required shall be retained for a period of five years from the date the record was created. Support information shall include, but not limited to, all calibration and maintenance records and all original electronic data for continuous monitoring instrumentation.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(5) 40 CFR 63, Subpart EEE:

The permittee shall continuously record the stack flow rate in acfm (as an hourly average) while burning waste. [per 63.1209(j)(2) & (k)(3) & (m)(2) & (n)(5) & (o)(2) & 1207(m)(4)(i)]

[Authority for term: 40 CFR, Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(6) 40 CFR 63, Subpart EEE:

The permittee shall continuously record the following hourly average lb/hour waste feed rates while burning waste:

a. total waste feed rate [per 63.1209(j)(3) & (k)(4)]; and

b. the pumpable waste feed rate [per 63.1209(j)(3) & (k)(4)].

[Authority for term: 40 CFR, Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(7) 40 CFR 63, Subpart EEE:

The permittee shall record the rolling, 12-hour average lb/hr flow rates of the following while burning waste:

a. the feed rate of low volatile metals (As, Be, and Cr)combined [per 63.1209(n)(2)];

b. the feed rate of semi volatile metals (Pb and Cd) combined [per 63.1209(n)(2)];

c. the mercury feed rate [per 63.1209(l)(1) & 1207(m)(4)(i)];

d. the ash flow rate [per 63.1209(m)(3)]; and

e. the chlorine feed rate [per 63.1209(n)(4) & (o)(1)].

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(8) 40 CFR 63, Subpart EEE:

The permittee shall continuously record the following combustion temperatures while burning waste:

a. the hearth flue temperature (as an hourly average) [per 63.1209(j)(1) & (k)(2)]; and

b. the secondary combustion chamber temperature (as an hourly average) [per 63.1209(j)(1) & (k)(2)].

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(9) 40 CFR 63.1209(p):

The permittee shall continuously record the hearth pressure while burning waste.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(10) The permittee shall continuously record the combustion air pressure while feeding liquid waste. [per 63.1209(j)(4)]

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the following parameters for the baghouse did not comply with the allowable range specified above while burning waste:

a. the leak indicator reading;

b. baghouse inlet gas temperature; and

c. the pressure drop across the baghouse.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(2) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels for the wet scrubber while burning waste:

a. the pH of the scrubber liquor;

b. the liquid-to-gas ratio;

c. the pressure drop across the scrubber; and

d. the scrubber blowdown rate.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(3) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the ppm CO emission rate was not maintained at or below the required levels while burning waste.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(4) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the combustion gas flow rate (stack gas flow rate) was not maintained as follows while burning waste:

a. at or below the required maximum flow rate in acfm (as an hourly average); and

b. at or above the required minimum flow rate in acfm (as a 12-hour average).

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(5) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the following hourly average lb/hour waste feed rates were not maintained at or below the required levels while burning waste:

a. total waste feed rate; and

b. the pumpable waste feed.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(6) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the rolling, 12-hour average lb/hr flow rates of the following were not maintained at or below the required levels while burning waste:

a. the feed rate of low volatile metals (As, Be, and Cr) combined;

b. the feed rate of semi volatile metals (Pb and Cd) combined;

c. the mercury feed rate;

d. the ash flow rate; and

e. the lb/hr chlorine feed rate.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(7) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the following combustion temperatures were not maintained at or above the required levels while burning waste:

a. the hearth flue temperature (as an hourly average); and

b. the secondary combustion chamber temperature (as an hourly average).

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(8) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the hearth pressure was not maintained at or below the required levels while burning waste.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(9) 40 CFR 63.10(e)(3):

The permittee shall submit quarterly deviation (excursion) reports (excess emissions and continuous monitoring system performance reports) that identify all periods of time during which the combustion air pressure was not maintained at or above the required level while feeding liquid waste.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(10) 40 CFR 63.1211:

Record Keeping and Reporting Requirements

Summary of reporting requirements. The permittee must submit the following reports to the Administrator:

Reference	Report
63.10(d)(5)(i)	Periodic startup, shutdown, and malfunction reports
63.10(d)(5)(ii)	Immediate startup, shutdown and malfunction reports
63.10(e)(3)	Excessive emissions and continuous monitoring system performance report and summary report
63.1206(c)(3)(vi)	Excessive exceedances reports

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(11) 40 CFR 63.10(d)(5)(i):

Periodic startup, shutdown, and malfunction reports.

If actions taken by the permittee during a startup, or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see 63.6(e)(3)], the permittee shall state such information in a startup, shutdown, and malfunction report. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup, or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standard, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator (the Ohio EPA Northeast District Office) semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's Title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate).

If the permittee is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports.

Alternatively, the permittee may submit the periodic startup, shutdown, and malfunction reports quarterly along with the deviation (excursion) reports.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(12) 40 CFR 63.10(d)(5)(ii):

Immediate startup, shutdown, and malfunction reports.

Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of 63.10, any time an action taken by a permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under 63.10(d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator (the Ohio EPA Northeast District Office) within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the permittee may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under 63.10(d)(5)(ii) are specified in 63.9(i).

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(13) 40 CFR 63.10(e)(3):

Excess emissions and continuous monitoring system performance report and summary report.

Excess emissions and parameter monitoring exceedances are defined in relevant standards. The permittee of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator (the Ohio EPA Northeast District Office) semiannually.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(14) 40 CFR 63.10(e)(3)(v):

Content and submittal dates for excess emissions and monitoring system performance reports.

All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or

exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of 63.10, in 63.8(c)(7) and 63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(15) 40 CFR 63.10(e)(3)(vi): Summary report.

As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of 63.10, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled "Summary Report--Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

a. the company name and address of the affected source;

b. an identification of each hazardous air pollutant monitored at the affected source;

c. the beginning and ending dates of the reporting period;

d. a brief description of the process units;

e. the emission and operating parameter limitations specified in the relevant standard(s);

f. the monitoring equipment manufacturer(s) and model number(s);

g. the date of the latest CMS certification or audit;

h. the total operating time of the affected source during the reporting period;

i. an emission data summary (or similar summary if the permittee monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

j. a CMS performance summary (or similar summary if the permittee monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment

malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

k. a description of any changes in CMS, processes, or controls since the last reporting period;

l. the name, title, and signature of the responsible official who is certifying the accuracy of the report; and

m. the date of the report.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(16) 40 CFR 63.10(e)(3)(vii):

If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(17) 40 CFR 63.10(e)(3)(viii):

If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

Alternatively, the permitte may submit the excess emissions and continuous monitoring system performance report and summary report quarterly along with the Title V deviation (excursion) reports.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(18) 40 CFR 63.1206(c)(3)(vi):

Excessive exceedance reporting.

a. For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, you must submit to the Administrator (the Ohio EPA Northeast District Office) a written report within 5 calendar days of the 10th exceedance documenting the exceedances and results of the investigation and corrective measures taken.

b. On a case-by-case basis, the Administrator may require excessive exceedance reporting when fewer than 10 exceedances occur during a 60-day block period.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(19) 40 CFR 63.1206(c)(2)(v)(A)(3)

Excessive exceedances during malfunctions.

a. For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, you must:

i. within 45 days of the 10th exceedance, complete an investigation of the cause of each exceedance and evaluation of approaches to minimize the frequency, duration, and severity of each exceedance, and revise the startup, shutdown, and malfunction plan as warranted by the evaluation to minimize the frequency, duration, and severity of each exceedance; and

ii. record the results of the investigation and evaluation in the operating record, and include a summary of the investigation and evaluation, and any changes to the startup, shutdown, and malfunction plan, in the excess emissions report required under 63.10(e)(3).

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(20) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

(21) The CAM plan for this emissions unit has been developed for SO_2 emissions controlled by the WHRI CScrb. The CAM performance indicators for the WHRI CScrb controlling this emissions unit are equivalent to the capture and control requirements established in 40 CFR Part 63, Subpart EEE for hazardous air pollutants (HAPs) controlled by a scrubber. Compliance with the operational restrictions, and monitoring, record keeping and reporting requirements in 40 CFR Part 63, Subpart EEE for HAPs satisfies the requirements of CAM for SO_2.

When the WHRI CScrb are operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

If a CAM indicator is outside of the designated range for more than 5% of the reporting period, the Director may require a Quality Improvement Plan for that CAM indicator in accordance with 40 CFR 64.8.

If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA Northeast District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: 40 CFR Part 64 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible emissions observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, and OAC rule 3745-17-03(B)(1) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04(A), and OAC rule 3745-17-03(B)(1)]

b. Emission Limitation:

Particulate emissions shall not exceed 0.10 pound per one hundred pounds of liquid, semi-solid or solid refuse and salvageable material charged.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5, and OAC rule 3745-17-03(B)(9) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04(A), and OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

SO_2 emissions shall not exceed 100 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 or 6C and OAC rule 3745-18-04(A) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-04(A), and OAC rule 3745-18-04(A)]

(2) 40 CFR 63.1206(c)(3)(vii): Testing.

The AWFCO system and associated alarms must be tested at least monthly to verify operability. The permittee must document and record in the operating record AWFCO operability test procedures and results.

[Authority for term: 40 CFR Part 63, Subpart EEE and OAC rule 3745-77-07(C)(1)]

(3) 40 CFR 63.1207(d)(4): Performance Testing.

a. Frequency of testing.

Except as otherwise specified in 63.1207(d)(4), the permittee must conduct testing periodically as prescribed in paragraphs (d)(1) through (d)(3) of 63.1207. The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. The permittee may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test. Unless the Administrator grants a time extension under 63.1207(i), the permittee must conduct testing as follows:

b. Comprehensive performance testing.

Except as otherwise specified in 63.1207(d)(4), the permittee must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test. If the permittee submits data in lieu of the initial performance test, you must commence the subsequent comprehensive performance test within 61 months of commencing the test used to provide the data in lieu of the initial performance test.

c. Confirmatory performance testing.

Except as otherwise specified in 63.1207(d)(4), the permittee must commence confirmatory performance testing no later than 31 months after the date of

commencing the previous comprehensive performance test. If the permittee submits data in lieu of the initial performance test, the permittee must commence the initial confirmatory performance test within 31 months of the date six months after the compliance date. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.

d. Duration of testing.

The permittee must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on the permittee's documentation in writing of factors beyond the permittee's control that prevent the permittee from meeting the 60-day deadline.

[Authority for term: 40 CFR Part 63, Subpart EEE, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

(4) 40 CFR 63.1207(h): Operating conditions during subsequent testing.

Current operating parameter limits established under 63.1209 are waived during subsequent comprehensive performance testing.

Current operating parameter limits are also waived during pretesting prior to comprehensive performance testing for an aggregate time not to exceed 720 hours of operation (renewable at the discretion of the Administrator) under an approved test plan or if the source records the results of the pretesting.

[Authority for term: 40 CFR Part 63, Subpart EEE, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

7. P006, Process G

Operations, Property and/or Equipment Description:

Production of lubricant additives using two reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by either one of two scrubbers, (G-3 Scrb or H-1 CScrb) or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

SO_2 emissions are controlled by a scrubber (G-4 CScrb).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.
b.	OAC rule 3745-18-49(B)(3)	Sulfur dioxide (SO_2) emissions shall not exceed 26.99 lbs/hr. See b)(2)f and b)(2)g.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

f. SO_2 emissions generated from all of the reactor tanks when processing sulfur containing materials shall be controlled by G-4 CScrb. This condition is not applicable once G-4 CScrb outlet is directed to AC-12 Fm Inc.

g. The emission limitation for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10 of the Facility-wide Terms and Conditions applies to this emissions unit once the G-4 CScrb outlet is directed to AC-12 Fm Inc.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in B. Facility- wide Terms 8.a) apply to this emissions unit.

(2) The permittee shall collect and record the following information for each:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of five tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) If the control efficiencies of the H-1 CScrb and/or G-3 Scrb are always assumed to be zero, and compliance with the emission limitation of 5 tons per rolling, 12-month period from all process vent streams not controlled by an incinerator or a flare is demonstrated by the required record keeping, then the scrubber is not subject to the requirements specified in d)(6), d)(7), d)(8), d)(9) and d)(10).

Pursuant to OAC rule 3745-21-09(LL)(3)(a), if the emission limitation of 5 tons per rolling, 12-month period has been exceeded when assuming the control efficiency of the scrubber is always zero, then the permittee shall comply with the requirements of OAC rule 3745-21-09(LL)(1), as well as all monitoring, record keeping, reporting and testing requirements specified in the terms and conditions for the scrubber.

[Authority for term: OAC rule 3745-21-09(LL)(1) and OAC rule 3745-77-07(C)(1)]

(6) The acceptable operating limitations for the H-1 CScrb and G-3 Scrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber, are the following:

a. the scrubber liquor flow rate is not less than 2 gallons per minute.

b. the pH of the scrubber liquor is not less than 7.0.

These operating rates are effective for the duration of this permit. Any changes in the acceptable levels must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the levels based upon information obtained during future VOC emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the levels will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) The permittee shall properly operate and maintain equipment to monitor the pH of H-1 CScrb and G-3 Scrb scrubber liquor and to continuously monitor the scrubber liquor flow rate, in gallons per minute, at all times when the emissions unit is in operation and the process vent stream is vented to the scrubber, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(8) The permittee shall collect and record the following information each day when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. the pH of the caustic scrubber liquor, before and after each batch and once during the batch (if the scrubber liquor is changed after a batch, the pH shall be collected and recorded at the end of the batch run);

b. the scrubber liquor flow rate, in gallons per minute, at the start of each batch; and

c. the operating times for the capture (collection) system, control device, and monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(9) Whenever the pH or flow rate deviates from the operating limitations, while the emissions unit is in operation and the process vent stream is vented to the scrubber, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(10) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the H-1 CScrb or G-3 Scrb above the acceptable operating limitations, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pH and/or flow rate readings immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(11) The monitoring and record keeping requirements for SO_2 emission vented to AC-12 Fm Inc specified in section B.10.b) of the Facility-wide Terms and Conditions apply to this emissions unit once the G-4 CScrb outlet is directed to AC-12 Fm Inc.

(12) Once the G-4 CScrb outlet is directed to AC-12 Fm Inc, the emissions unit and scrubber are not subject to the monitoring and record keeping requirements specified in d)(13), d)(14), d)(15), d)(16), d)(17), d)(18), d)(19), d)(20) and d)(21).

(13) The permittee shall develop emission factors for the amount of SO_2 emitted from the process, either for each final product generated or for each batch run in this emissions unit. The emission factors shall be in units of pounds of SO_2 emitted per kg of final product generated, or pounds of SO_2 emitted per batch.

The SO_2 emission factors and detailed calculations shall be kept on site and available for Ohio EPA review.

If necessary, the permittee shall conduct emission testing, at the request of the Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(14) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of hours per batch;

d. the emission factor for sulfur compound emissions used to determine the amount of SO_2 emitted from the process for each final product generated (in pounds/kg of final product generated or pounds/batch run);

e. the total SO_2 emission (in lbs or tons), after controls, from the process unit; and

f. the average hourly SO_2 emission rate for each batch, in pounds per hour, and the maximum lb/hr SO_2 emission rate accounting for the possibility of multiple batches being made simultaneously.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(15) If the SO_2 control efficiency of the G-4 CScrb is always assumed to be zero, then the scrubber is not subject to the requirements specified in d)(16), d)(17), d)(18), d)(19), and d)(20).

(16) The acceptable operating limitations for the G-4 CScrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber, are the following:

a. The acceptable level for the the scrubber liquor flow rate is not less than 2 gallons per minute.

b. The NaOH concentration of the scrubber liquor shall be the minimum concentration established during the most recent emission test that demonstrated the emissions unit was in compliance with the allowable mass emission rate for SO_2. If a deviation in the minimum free NaOH concentration occurs, the facility may choose to demonstrate compliance through stack testing and establish a lower minimum free NaOH concentration.

These levels are effective for the duration of this permit. If the acceptable levels are not rule based, the permittee may request revisions. Any changes in the acceptable levels must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the levels based upon information obtained during future SO_2 emission tests that demonstrate compliance with the allowable SO_2 emission rate for this emissions unit. In addition, approved revisions to the levels will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(17) The permittee shall properly operate and maintain equipment to monitor the free NaOH concentration of G-4 CScrb scrubber liquor and to continuously monitor the scrubber liquor flow rate, in gallons per minute, at all times when the emissions unit is in operation and the process vent stream is vented to the scrubber, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(18) The permittee shall collect and record the following information each day when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. the free NaOH concentration (percent) of the scrubber liquor (the permittee shall record the percent free NaOH concentration before and after each batch reaction);

b. the scrubber liquor flow rates, in gallons per minute, at the start of each batch; and

c. the operating times for the capture (collection) system, control device, and monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(19) Whenever the NaOH concentration or flow rate deviates from the operating limitations, while the emissions unit is in operation and the process vent stream is vented to the scrubber, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(20) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the G-4 CScrb above the acceptable operating limitations, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the NaOH concentration and/or flow rate immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(21) The permittee shall record daily any time period that emissions of SO_2 were not vented to the caustic wet scrubber.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the 5 tons per rolling, 12-month emission limitation for VOC.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B. Facility-wide Terms and Conditions paragraph 9.b) apply to this emissions unit.

(3) The reporting requirements for S-4 Flare specified in section B. Facility- wide Terms and Conditions paragraph 11.b) apply to this emissions unit.

(4) The reporting requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B. Facility-Wide Terms and Conditions paragraph 10.c) apply to this emissions unit once the emissions from G-4 CScrb are vented to AC-12-Fm Inc.

(5) Unless the control efficiency of G-3 Scrb and/or H-1 CScrb is assumed to be zero, the permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. each period of time when the scrubber liquor pH or the scrubber liquor flow rate was below the respective acceptable levels;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber liquor pH and scrubber liquor flowrate into compliance with the acceptable levels, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) Once G-4 CScrb outlet is directed to AC-12 Fm Inc, the emission unit and scrubber are not subject to the reporting requirements specified in d)(7), d)(8), and d)(9).

(7) Unless the control efficiency of G-4 CScrb is assumed to be zero, the permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. each period of time when the free NaOH concentration (percent) of the scrubber liquor or the scrubber liquor flow rate was below the respective acceptable levels;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the free NaOH concentration (percent) of the scrubber liquor and scrubber liquor flow rate into compliance with the acceptable levels, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(8) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the pound per hour emission limitation for SO_2.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(9) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which emissions of SO_2 were not vented to G-4 CScrb when processing sulfur containing materials.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(10) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d)).

This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(11) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

SO_2 emissions shall not exceed 26.99 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping required in d).

If required, compliance shall be demonstrated by emissions testing G-4 CScrb performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 or 6C and OAC rule 3745-18-04(A), or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc in section B. Facility-wide Terms and Conditions paragraph 9.c) apply to this emissions unit.

(3) The testing requirements for SO2 emissions vented to AC-12 Fm Inc specified in section B. Facility- wide Terms and Conditions paragraph 10.d) apply to this emissions unit once G-4 CScrb outlet is directed to AC-12 Fm Inc.

(4) Once G-4 CScrb outlet is directed to AC-12 Fm Inc, the emission unit and scrubber are not subject to the testing requirements specified in f)(5) for G-4 CScrb.

(5) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements (unless the control efficiency is assumed to be zero):

a. The emission testing shall be conducted within 2.5 years of issuance of the permit (If the control efficiency is assumed to be zero and subsequently the control efficiency is required to comply with the SO_2 emission limitation, then the emissions testing shall be conducted 90 days after such determination).

b. Emission testing shall be conducted to determine the control efficiency of G-3 Scrb and/or H-1 CScrb and/or G-4 CScrb.

c. 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.

d. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

e. 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).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10, and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

8. P007, Process H

Operations, Property and/or Equipment Description:

Production of lubricant additives using three reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by either one of two scrubbers (H-1 CScrb or G-3 Scrb), a carbon adsorber (U-7 CDrum), or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of five tons per rolling, twelve month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) If the control efficiency of the H-1 CScrb and/or G-3 Scrb is always assumed to be zero, and compliance with the emission limitation of five tons per rolling, 12-month period from all process vent streams not controlled by an incinerator or a flare is demonstrated by the required record keeping, then the scrubber is not subject to the requirements specified in d)(6), d)(7), d)(8), d)(9), and d)(10).

Pursuant to OAC rule 3745-21-09(LL)(3)(a), if the emission limitation of 5 tons per rolling, 12-month period has been exceeded when assuming the control efficiency of the scrubber is always zero, then the permittee shall comply with the requirements of OAC

rule 3745-21-09(LL)(1), as well as all monitoring, record keeping, reporting and testing requirements specified in the terms and conditions for the scrubber.

[Authority for term: OAC rule 3745-21-09(LL)(1) and OAC rule 3745-77-07(C)(1)]

(6) The acceptable operating limitations for the H-1 CScrb and G-3 Scrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber, are the following:

a. the scrubber liquor flow rate is not less than 2 gallons per minute.

b. the pH of the scrubber liquor is not less than 7.0.

These operating rates are effective for the duration of this permit. Any changes in the acceptable levels must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the levels based upon information obtained during future VOC emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the levels will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) The permittee shall properly operate and maintain equipment to monitor the pH of H-1 CScrb and G-3 Scrb scrubber liquor and to continuously monitor the scrubber liquor flow rate, in gallons per minute, at all times when the emissions unit is in operation and the process vent stream is vented to the scrubber, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(8) The permittee shall collect and record the following information each day when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. the pH of the scrubber liquor, before and after each batch and once during the batch (if the scrubber liquor is changed after a batch, the pH shall be collected and recorded at the end of the batch run);

b. the scrubber liquor flow rate, in gallons per minute, at the start of each batch; and

c. the operating times for the capture (collection) system, control device, and monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(9) Whenever the pH or flow rate deviates from the operating limitations, while the emissions unit is in operation and the process vent stream is vented to the scrubber, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(10) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the H-1 CScrb or G-3 Scrb above the acceptable operating limitations, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed,

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pH and/or flow rate immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(11) The monitoring and record keeping requirements for carbon adsorption specified in section B.12.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the 5 tons per rolling, 12-month emission limitation for VOC.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for carbon adsorption specified in section B.12.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) Unless the control efficiency of H-1 CScrb and/or G-3 Scrb is assumed to be zero, the permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. each period of time when the scrubber liquor pH or the scrubber liquor flow rate was less than the operating limitations;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber liquor pH and scrubber liquor flowrate into compliance with the acceptable levels, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d).

This reporting obligation is satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements unless the control efficiency is assumed to be zero:

a. The emission testing shall be conducted within 2.5 years of issuance of the permit.

b. The emission testing shall be conducted to determine the control efficiency of H-1 CScrb and/or G-3 Scrb.

c. 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.

d. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

e. 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).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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 appropriate 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10, and OAC rule 3745-77-07(C)(1)]

(3) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The testing requirements for carbon adsorption specified in section B.12.c) of the Facility-Wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

9. Reactor Group #1 P012, P013, P014, P022 and P030

EU ID	Operations, Property and/or Equipment Description
P012	Production of lubricant additives using four reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks. Volatile organic compound (VOC) emissions are controlled by either a scrubber (P-2 WScrb), a carbon adsorber (M-7, O-1, or P-3 CDrum) or an incinerator (AC-12 Fm Inc) backed up by a flare (S-4 Flare).
P013	Production of lubricant additives using four reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks. Volatile organic compound (VOC) emissions are controlled by either a carbon adsorber (O-1 CDrum), a scrubber (P-2 WScrb), or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).
P014	Production of lubricant additives using two reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks. Volatile organic compound (VOC) emissions are controlled by either a carbon adsorber (O-1 CDrum), a scrubber (P-2 WScrb), or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).
P022	Production of lubricant additives using various blending tanks. Volatile organic compound (VOC) emissions are controlled by a carbon adsorber (W-1 CDrum) or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).
P030	Production of lubricant additives using one reactor system. A reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks. Volatile organic compound (VOC) emissions are controlled by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable

emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09 (LL)	See b)(2)a through b)(2)e.
b.	OAC rule 3745-18-49(B) and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000	P012 SO_2: 160.0 lbs/hr, P013 SO_2: 25.0 lbs/hr, P014 SO_2: 10.0 lbs/hr, P022 SO_2: 20.0 lbs/hr, P030 SO_2: 30.0 lbs/hr, See b)(2)f.
c.	OAC rule 3745-31-05(A) PTI 02-872 effective 12/8/1981 for P022 only	The PTI for this emissions unit did not include additional BAT requirements.
d.	OAC rule 3745-31-05(A)(3)(a)(ii) P0105712 effective 12/1/2009 P030 only	Nitrogen oxide (NO_x) emissions shall not exceed 1.50 lbs/hr and 6.57 tons per year from each incinerator controlling P030. Carbon monoxide (CO) emissions shall not exceed 1.26 lbs/hr and 5.52 tons per year from each incinerator controlling P030. See b)(2)g. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, PM, and SO_2 emissions from the incinerators controlling this air contaminant source since the uncontrolled potential to emit for the air contaminant is less than 10 tons/year.
e.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	P012 and P030: Pursuant to 40 CFR 64.2(b)(1)(vi), CAM does not apply to the SO_2 emissions monitored with a certified CERMs. P030: The CAM requirements of 40 CFR Part 64 apply to the VOC emissions controlled by AC-12 Fm Inc backed up by S-4 Flare. See b)(2)i.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

f. The total hourly and annual SO_2 emissions from emissions units P011 (shutdown), P012, P013, P014, P022 and P030, combined, shall not exceed 247.4 lbs per hour and 100 tons per year.

The total allowable SO_2 emissions for the fume incinerator system for any hour shall be the sum of the individual allowable SO_2 emissions limitations for those emissions units that are in operation during any part of that hour. The total allowable SO_2 emission rate for the fume incinerator system for any rolling, 3-hour period shall be the average of the three 1-hour allowables comprising the 3-hour period.

g. The short term emission limitations for NO_x and CO from each thermal incinerator was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

h. The emission limitation for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.a) of the Facility-wide Terms and Conditions applies to this emissions unit.

i. This emissions unit is a pollutant specific emissions unit for VOC according to 40 CFR Part 64 and has developed a CAM plan.

Pursuant to 40 CFR Part 64, the permittee has submitted, and the Ohio EPA has approved, a CAM plan for emissions unit P030. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-Wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for P-2 WScrb specified in section B.13.a) of the Facility- wide Terms and Conditions apply to P012, P013 and P014.

(6) The monitoring and record keeping requirements for carbon adsorption specified in section B.12.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(7) The monitoring and record keeping requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.b) of the Facility-wide Terms and Conditions apply to this emissions unit

(8) The CAM plan for this emissions unit has been developed for VOC emissions. The CAM performance indicators for VOC are equivalent to the monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-Wide Terms and Conditions and the monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(9) When the emissions unit is operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

If a CAM indicator is outside of the designated range for more than 5% of the operating time for a reporting period, the Director may require a Quality Improvement Plan for that CAM indicator in accordance with 40 CFR 64.8.

If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA Northeast District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-Wide Terms and Conditions apply to this emissions unit.

(2) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.c) of the Facility-Wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for P-2 WScrb specified in section B.13.b) of the Facility-wide Terms and Conditions apply to emissions units P012, P013 and P014.

(5) The reporting requirements for carbon adsorption specified in section B.12.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(6) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the 5 tons per rolling, 12-month emission limitation for VOC.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(7) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d). This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(8) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

P012 SO_2: 160.0 lbs/hr
P013 SO_2: 25.0 lbs/hr
P014 SO_2: 10.0 lbs/hr
P022 SO_2: 20.0 lbs/hr
P030 SO_2: 30.0 lbs/hr

The total allowable SO_2 emissions for the fume incinerator system for any hour shall be the sum of the individual allowable SO_2 emission limitations for those emissions units that are in operation during any part of that hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the records of data obtained by the continuous SO_2 monitoring system, as required in d), and, if required, by emissions testing of the incinerator system using the procedures specified in OAC rule 3745-18-04(A) and test Method 6 or 6C of 40 CFR Part 60, Appendix A.

Emissions testing and the relative accuracy test on the continuous SO_2 monitor may be conducted at the same time while operating emissions units P012, P013, P014, P022 and P030 at worst case emission conditions.

[Authority for term: OAC rule 3745-77-07(C)(1), and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000]

c. Emission Limitation:

The total annual SO_2 emissions from emissions units P011 (shutdown), P012, P013, P014, P022 and P030, combined, shall not exceed 100 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d) and by records of data obtained by the continuous SO_2 monitoring system.

[Authority for term: OAC rule 3745-77-07(C)(1), and Director's Final Findings and Orders for alternative SO_2 emission control strategy, November 9, 2000]

d. Emission Limitation:

NO_x emissions shall not exceed 1.50 lbs/hr and 6.57 tons per year from each incinerator controlling emissions unit P030.

Applicable Compliance Method:

Compliance with the hourly NO_x emission limitation shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) or latest revision for natural gas combustion and the maximum input capacity of the gas burners.

$E(NO_x)$ = (15 mmBtu/hr) * [(100 lbs/mm scf) / (1,000 Btu/scf)]

If required, the compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (1.50 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if

compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 1.26 lbs/hr and 5.52 tons per year from each incinerator controlling emissions unit P030.

Applicable Compliance Method:

Compliance with the hourly limitation shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) for natural gas combustion and the maximum input capacity of the gas burners.

E(CO) = (15 mmBtu/hr) * [(84 lbs/mm scf) / (1,000 Btu/scf)]

If required, the compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the short-term allowable CO limitation (1.26 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

(2) The testing requirements for P-2 WScrb specified in section B.13.c) of the Facility-Wide Terms and conditions apply to emissions units P012, P013 and P014.

(3) The testing requirements for AC-12 Fm Inc in section B.9.c) of the Facility-Wide Terms and conditions apply to this emissions unit.

(4) The testing requirements for carbon adsorption specified in section B.12.c) of the Facility-Wide Terms and Conditions apply to this emissions unit.

(5) The testing requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.d) of the Facility-Wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

10. P015, Process P

Operations, Property and/or Equipment Description:

Production of lubricant additives using five reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by a scrubber (P-2 WScrb), a carbon adsorber (P-3 CDrum), a flare (S-4 Flare), or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for P-2 WScrb specified in section B.13.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(6) The monitoring and record keeping requirements for carbon adsorption specified in section B.12.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC emission limitation of 5 tons per rolling, 12-month period.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d).

This reporting obligation is satisfied by the fee emissions report submitted by the permittee.

(3) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Condition apply to this emissions unit.

(4) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) The reporting requirements for P-2 WScrb specified in section B.13.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(6) The reporting requirements for carbon adsorption specified in section B.12.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(7) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or

25A, oran alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for carbon adsorption specified in section B.12.c) of the Facility-Wide Terms and conditions apply to this emissions unit.

(3) The testing requirements for P-2 WScrb specified in section B.13.c) of the Facility-Wide Terms and conditions apply to this emissions unit.

(4) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

11. P018, Process S

Operations, Property and/or Equipment Description:

Production of lubricant additives using three reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by a scrubber (P-2 WScrb), a carbon adsorber (P-3 CDrum), a flare (S-4 Flare), or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and recordkeeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for P-2 WScrb specified in section B.13.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(6) The monitoring and record keeping requirements for carbon adsorption specified in section B.12.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC emission limitation of 5 tons per rolling, 12-month period.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for P-2 WScrb specified in section B.13.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The reporting requirements for carbon adsorption specified in section B.12.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(6) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d).

This reporting obligation is satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for P-2 WScrb specified in section B.13.c) of the Facility-Wide Terms and conditions apply to this emissions unit.

(3) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The testing requirements for carbon adsorption specified in section B.12.c) of the Facility- wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

12. P020, Process U

Operations, Property and/or Equipment Description:

Production of lubricant additives using two reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by a carbon adsorber (U-7 or U-8 CDrum), a flare (U-5 Flare), or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.
b.	OAC rule 3745-31-05(A) PTI 02-784 effective 8/21/1981	The PTI for this emissions unit did not include BAT requirements.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	The CAM requirements of 40 CFR Part 64 apply to the VOC emissions controlled by U-5 Flare or AC-12 Fm Inc backed by S-4 Flare. See b)(2)f.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare and U-5 Flare are exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flares were installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

f. This emissions unit is a pollutant specific emissions unit for VOC according to 40 CFR Part 64 and has developed a CAM plan.

Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a CAM plan for emissions unit P020. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare and U-5 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for carbon adsorption specified in section B.12.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(6) The CAM plan for this emissions unit has been developed for VOC emissions. The CAM performance indicators for VOC are equivalent to the monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-Wide Terms and Conditions and the monitoring and record keeping requirements for S-4 Flare and U-5 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) When the emissions unit is operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the CAM Plan.

If a CAM indicator is outside of the designated range for more than 5% of the operating time for a reporting period, the Director may require a Quality Improvement Plan for that CAM indicator in accordance with 40 CFR 64.8.

If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA Northeast District Office and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the 5 tons per rolling, 12-month emission limitation for VOC.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for S-4 Flare and U-5 Flare specified in section B.11.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for carbon adsorption specified in section B.12.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(5) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d).

This reporting obligation is satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for carbon adsorption specified in section B.12.c) of the Facility- wide Terms and Conditions apply to this emissions unit.

(3) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

[Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

13. P024, Process Y

Operations, Property and/or Equipment Description:

The handling and storage of lime using a fabric filter baghouse (Y-1 Filter) to control particulate emissions.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	See b)(2)a.
b.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 3.53 lbs/hr.

(2) Additional Terms and Conditions

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

b. All particulate emissions from this emissions unit shall be vented to the baghouse.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform checks for any visible particulate emissions that may result from the unloading of lime. The presence or absence of any visible emissions shall be noted in an operations log each time lime is unloaded into the storage silo. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. whether the emissions are representative of normal operations;

b. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

c. the total duration of any visible emission incident; and

d. any corrective actions taken to minimize or eliminate the visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that:

a. identify all times during which any visible particulate emissions were observed from this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible particulate emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

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

<u>Applicable Compliance Method</u>:

If required, compliance shall be demonstrated based upon visible emissions observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9, and OAC rule 3745-17-03(B)(1) or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-17-03(B)(1), and OAC rule 3745-77-07(C)(1)]

b. <u>Emission Limitation</u>:

Particulate emissions shall not exceed 3.53 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-17-03(B)(10), and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

14. P025, Process A

Operations, Property and/or Equipment Description:

Production of lubricant additives using one reactor system. The reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks, and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by a scrubber (A-21 OScrb) followed by a condenser (A-22 RCond).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a and b)(2)b.

(2) Additional Terms and Conditions

a. Total VOC emissions not controlled by an incinerator or flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or flare shall be based on the emissions from all process vent streams.

b. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)(a).

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) If the control efficiency of the A-21 OScrb is always assumed to be zero, and compliance with the emission limitation of 5 tons per rolling, 12-month period from all process vent streams not controlled by an incinerator or a flare is demonstrated by the required record keeping, then the scrubber is not subject to the requirements specified in d)(4), d)(5), d)(6), d)(7) and d)(8).

Pursuant to OAC rule 3745-21-09(LL)(3)(a), if the emission limitation of 5 tons per rolling, 12-month period has been exceeded when assuming the control efficiency of the scrubber is always zero, thenthe permittee shall comply with the requirements of OAC rule 3745-21-09(LL)(1), as well as all monitoring, record keeping, and reporting requirements specified in the terms and conditions for the scrubber.

[Authority for term: OAC rule 3745-21-09(LL)(1) and OAC rule 3745-77-07(C)(1)]

(4) The acceptable oil flow rate for A-21 OScrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber, is not less than 2 gallons per minute.

This operating limitation is effective for the duration of this permit. Any changes in the acceptable level must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the level based upon information obtained during future VOC emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the level will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) The permittee shall properly operate and maintain equipment to continuously monitor and record the scrubber oil flow rate for A-21 OScrb, in gallons per minute, at all times when the emissions unit is in operation and the process vent stream is vented to the scrubber, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's

recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) The permittee shall record the following information each day when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. the scrubber oil flow rate, in gallons per minute.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) Whenever the flow rate deviates from the operating limitation, while the emissions unit is in operation and the process vent stream is vented to the scrubber, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(8) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the A-21 OScrb above the acceptable operating limitation, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the flow rate immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(9) If the control efficiency of the A-22 RCond is always assumed to be zero, and compliance with the emission limitation of 5 tons per rolling, 12-month period from all process vent streams not controlled by an incinerator or a flare is demonstrated by the required record keeping, then the condenser is not subject to the requirements specified in d)(10), d)(11), d)(12), d)(13) and d)(14).

Pursuant to OAC rule 3745-21-09(LL)(3)(a), if the emission limitation of 5 tons per rolling, 12-month period has been exceeded when assuming the control efficiency of the scrubber is always zero, then the permittee shall comply with the requirements of OAC rule 3745-21-09(LL)(1), as well as all monitoring, record keeping, and reporting requirements specified in the terms and conditions for the condenser.

[Authority for term: OAC rule 3745-21-09(LL)(1) and OAC rule 3745-77-07(C)(1)]

(10) The acceptable average temperature of the exhaust gases from the condenser for any 3-hour block of time, when the emissions unit is in operation and the process vent stream is vented to the condenser, is not more than 11 degrees Fahrenheit above the average temperature, as specified by the manufacturer.

This operating limitation is effective for the duration of this permit. Any changes in the acceptable level must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the temperature level based upon information obtained during future VOC emission tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the temperature level will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(11) The permittee shall properly operate and maintain equipment to continuously monitor and record the temperature of the exhaust gases of A-22 RCond, at all times when the emissions unit is in operation and the process vent stream is vented to the condenser, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple monitorshall be guaranteed by the manufacturer to be within $\pm$ 1 percent of the temperature being measured or $\pm$ 5 degrees Fahrenheit, whichever is greater. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer"s recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(12) The permittee shall record the following information each day when the emissions unit is in operation and the process vent stream is vented to the condenser:

a. the average temperature of the exhaust gases from the condenser, in 3-hour blocks; and

b. a log or record of the operating times for the capture (collection) system, control device, and monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(13) Whenever the temperature of the exhaust gases of the condenser deviates from the operating limitation, while the emissions unit is in operation and the process vent stream is vented to the condenser, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(14) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the A-22 RCond above the acceptable operating limitation, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the temperature of the exhaust gases immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC emission limitation of 5 tons per rolling, 12-month period.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d).

This reporting obligation is satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) Unless the control efficiency of A-21 OScrb is assumed to be zero, the permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. each period of time when the scrubber oil flow rate was less than the operating limitation;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber oil flow rate into compliance with the acceptable value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(4) Unless the control efficiency of A-22 RCond is assumed to be zero, the permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment when the emissions unit is in operation and the process vent stream is vented to the condenser:

a. any 3-hour block of time when the temperature of the exhaust gases of the condenser was less than the operating limitation;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the temperature level of the exhaust gases of the condenser into compliance with the acceptable value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Total VOC emissions not controlled by an incinerator or flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping required in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements (unless the control efficiency is assumed to be zero):

a. The emission testing shall be conducted within 2.5 years of issuance of the permit, or within 3 months of startup (if temporarily shutdown at the time of permit issuance).

b. The emission testing shall be conducted to determine the control efficiency of A-21 OScrb and/or A-22 RCond.

c. 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.

d. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

e. 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).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10, and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

15. P029, Process Z

Operations, Property and/or Equipment Description:

Production of lubricant additives using two reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by either a flare (Z-10 Flare) or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

Sulfur containing compounds are controlled by a scrubber (Z-5 CScrb).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.
b.	OAC rule 3745-18-49(B)(10)	Sulfur dioxide (SO_2) emissions shall not exceed 68.8 lbs/hr.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	The CAM requirements of 40 CFR Part 64 apply to the SO_2 emissions controlled by Z-5 CScrb. See b)(2)g.

(2) Additional Terms and Conditions

a. The volatile organic compound (VOC) emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the Z-10 Flare and S-4 Flare are exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

f. The emission limitations for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.a) of the Facility- wide Terms and Conditions apply to this emissions unit once the Z-5 CScrb outlet is directed to AC-12 Fm Inc.

g. This emissions unit is a pollutant specific emissions unit for SO_2 according to 40 CFR Part 64 and has developed a CAM plan.

Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a CAM plan for this emissions unit. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions unit.

Once the Z-5 CScrb outlet is directed to AC-12 Fm Inc and monitored by a certified SO_2 CERMS, the emissions unit and scrubber are exempt according to 40 CFR 64.2(b)(1)(vi) and are not subject to the monitoring and record keeping requirements specified in d)(7), d)(8), d)(9), d)(10), d)(11), d)(12), d)(13), d)(14) and d)(15).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for Z-10 Flare and S-4 Flare specified in section B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for SO_2 emission vented to AC-12 Fm Inc specified in section B.10.b) of the Facility-wide Terms and Conditions apply to this emissions unit once the Z-5 CScrb outlet is directed to AC-12 Fm Inc.

(6) Once the Z-5 CScrb outlet is directed to AC-12 Fm Inc, the emissions unit and scrubber are not subject to the monitoring and record keeping requirements specified in d)(7), d)(8), d)(9), d)(10), d)(11), d)(12), d)(13), d)(14) and d)(15).

(7) The permittee shall develop emission factors for the amount of SO_2 emitted from the process, either for each final product generated or for each batch run in this emissions unit. The emission factors shall be in units of pounds of SO_2 emitted per kg of final product generated, or pounds of SO_2 emitted per batch.

The SO_2 emission factors and detailed calculations shall be kept on site and available for Ohio EPA review.

If necessary, the permittee shall conduct emission testing, at the request of the Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(8) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of hours per batch;

d. the emission factor for sulfur compound emissions used to determine the amount of SO_2 emitted from the process for each final product generated (in pounds/kg of final product generated or pounds/batch run);

e. the total SO_2 emission rate (in lbs or tons), after controls, from the process unit; and

f. the average hourly SO_2 emission rate for each batch, in pounds per hour, and the maximum lb/hr SO_2 emission rate accounting for the possibility of multiple batches being made simultaneously.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(9) The acceptable operating limitations for the Z-5 CScrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber, are the following:

a. the Na_2S and NaOH concentrations of the scrubber liquor shall be greater than zero (0) percent (%); and

b. the scrubber liquor flow rate is not less than 2 gallons per minute.

These levels are effective for the duration of this permit. Any changes in the acceptable levels must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the levels based upon information obtained during future SO_2 emission tests that demonstrate compliance with the allowable SO_2 emission rate for this emissions unit. In addition, approved revisions to the levels will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(10) The permittee shall properly operate and maintain equipment to monitor the free Na_2S and NaOH concentrations of Z-5 CScrb scrubber liquor and to continuously monitor the scrubber liquor flow rate, in gallons per minute, at all times when the emissions unit is in operation and the process vent stream is vented to the scrubber, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(11) The permittee shall collect and record the following information each day when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. the free Na_2S and NaOH concentrations (percent) of the scrubber liquor (the permittee shall record the percent free Na_2S and NaOH concentrations before and after each batch reaction);

b. the scrubber liquor flow rates, in gallons per minute, at the start of each batch; and

c. the operating times for the capture (collection) system, control device, and monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(12) Whenever the Na_2S and NaOH concentrations or flow rate deviates from the operating limitations, while the emissions unit is in operation and the process vent stream is vented to the scrubber, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(13) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the Z-5 CScrb above the acceptable operating limitations, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the Na_2S and NaOH concentration and/or flow rate immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(14) The CAM plan for this emissions unit has been developed for SO_2 emissions. The CAM performance indicators for SO_2 are equivalent to the monitoring and record keeping requirements for Z-5 CScrb specified in d)(9), d)(10), d)(11), d)(12) and d)(13).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(15) When the emissions unit is operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the CAM Plan.

If a CAM indicator is outside of the designated range for more than 5% of the operating time for a reporting period, the Director may require a Quality Improvement Plan for that CAM indicator in accordance with 40 CFR 64.8.

If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA Northeast District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC emission limitation of 5 tons per rolling, 12-month period.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for Z-10 Flare and S-4 Flare specified in B.11.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.c) of the Facility-Wide Terms and Conditions apply to this emissions unit once the emissions from Z-5 CScrb are vented to AC-12-Fm Inc.

(5) Once the Z-5 CScrb outlet is directed to AC-12 Fm Inc, the emissions unit and scrubber are not subject to the reporting requirements specified in d)(6) and d)(7).

(6) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the pound per hour emission limitation for SO_2.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of Z-5 CScrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. each period of time when the free Na_2S or NaOH concentrations (percent) of the scrubber liquor or the scrubber liquor flow rate was less than the operating limitations;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the free Na_2S or NaOH concentrations (percent) of the scrubber liquor and scrubber liquor flow rate into compliance with the acceptable levels, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(8) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d). This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(9) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

<u>Applicable Compliance Method:</u>

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

SO_2 emissions shall not exceed 68.8 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, compliance shall be demonstrated by emissions testing of Z-5 CScrb performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 6 or 6C and OAC rule 3745-18-04(A), or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-18-04(A), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The testing requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.d) of the Facility-wide Terms and Conditions apply to this emissions unit once the Z-5 CScrb outlet is directed to AC-12 Fm Inc.

(4) Once the Z-5 CScrb outlet is directed to AC-12 Fm Inc, the emissions unit and scrubber are not subject to the testing requirements specified in f)(5).

(5) 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 2.5 years of issuance of the permit.

b. The emission testing shall be conducted to determine the control efficiency Z-5 CScrb.

c. 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.

d. The permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

e. 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).

f. Personnel from the Ohio EPA Northeast District Office 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.

g. 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.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10, and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

16. P034, Process AG

Operations, Property and/or Equipment Description:

Production of specialty additives using one reactor system. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks, and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in B.9.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC emission limitation of 5 tons per rolling, 12-month period.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility- wide Terms and Conditions apply to this emissions unit.

(4) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by the record keeping requirements specified under d). This reporting obligation is satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

Applicable Compliance Method:

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

17. P036, Process AI

Operations, Property and/or Equipment Description:

Production of lubricant additives using three reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by either a carbon adsorber (P-3 CDrum) or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for carbon adsorption specified in section B.12.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC emission limitation of 5 tons per rolling, 12-month period.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for carbon adsorption specified in section B.12.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by the record keeping requirements specified in d).

This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for carbon adsorption specified in section B.12.c) of the Facility-Wide Terms and Conditions apply to this emissions unit.

(3) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

18. P038 Loading Rack A/B 8

Operations, Property and/or Equipment Description:

Rack A/B 8: Loading of lubricant additives and gasoline additives to tank cars.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-09105 (modification effective 9/24/2002)	See b)(2)a through b)(2)d.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 23.0 pounds per hour. This short-term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 5.3 tons per year from emissions unit P038.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046, and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

LL= (12.46 SPM) / (T+460)

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P038, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined; and

d. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for emission units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 23.0 pounds per hour.

Applicable Compliance Method:

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

HR VOC= (HRTL/1000)(1-C)(LL)

where:

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

C= overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/1000 gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

LL= (12.46 SPM) / (T+460)

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Methods 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emissions Limitation:

VOC emissions shall not exceed 5.3 tons per year.

Applicable Compliance Method:

Compliance with the emission limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emissions Limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance with this emissions limit shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

19. P039, Rack A 11

Operations, Property and/or Equipment Description:

Rack A 11: Loading of lubricant additives to tank cars.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Rule 3745-31-05(A)(3) PTI 02-09105 (modification effective 9/24/2002)	See b)(2)a through b)(2)d.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 12.0 pounds per hour. This short-term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 2.7 tons per year from emissions unit P039.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046 and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P039, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined; and

d. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 12.0 pounds per hour.

Applicable Compliance Method:

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

HR VOC= (HRTL/1000)(1-C)(LL)

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/1000 gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

LL= (12.46 SPM) / (T+460)

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Methods 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 2.7 tons per year.

Applicable Compliance Method:

Compliance with the emission limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emission limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

20. P040, Rack C/D 8-9-10

Operations, Property and/or Equipment Description:

Rack C/D 8-9-10: Loading of lubricant additives, anglamols and gasoline additives to tank cars, controlled by a carbon adsorber (R CDrum 1).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-09105 (modification effective 9/24/2002)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 170.0 pounds per hour. This short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions unit P040 and 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

d. All loading of anglamols shall be accomplished in such a manner that displaced vapors and gases shall be vented to a carbon adsorption system. The carbon adsorption system shall be operated with sufficient volumetric flow at the point(s) of capture to minimize or eliminate odor emissions. Upon detection of any breakthrough of odors from the carbon adsorption system, the permittee shall immediately recharge/replace the system with fresh carbon.

e. All loading of gasoline additives shall be accomplished either through a submerged fill loading line or shall be bottom loaded.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046 and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P040, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in tons;

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall record daily any time period that displaced vapors and gases were not vented to the carbon adsorption system while loading anglamols.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall record daily any time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

d. an identification of each time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point;

e. an identification of any time period that anglamols were loaded and the carbon adsorption system was not used to control the emissions; and

f. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 170.0 pounds per hour.

<u>Applicable Compliance Method</u>:

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

HR VOC= (HRTL/1000)(1-C)(LL)

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/1000 gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

LL = (12.46 SPM) / (T+ 460)

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Methods 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions unit P040 and 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

21. P041, Rack C/D 11

Operations, Property and/or Equipment Description:

Rack C/D 11: Loading of lubricant additives, anglamols, gasoline additives, and waste and recovered materials to tank cars, controlled by a carbon adsorber (R CDrum 1).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-09105 (modification effective 9/24/2002)	See b)(2)a through b)(2)f.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 90.0 pounds per hour. This short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 21.0 tons per year from emissions unit P041.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

e. All loading of anglamols shall be accomplished in such a manner that displaced vapors and gases shall be vented to a carbon adsorption system. The carbon adsorption system shall be operated with sufficient volumetric flow at the point(s) of capture to minimize or eliminate odor emissions. Upon detection of any breakthrough of odors from the carbon adsorption system, the permittee shall expediently recharge/replace the system with fresh carbon.

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

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046 and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P041, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall record daily any time period that displaced vapors and gases were not vented to the carbon adsorption system while loading anglamols.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall record daily any time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined;

d. an identification of each time that displaced vapors and gases were not vented to the carbon adsorption system while loading anglamols;

e. an identification of each time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point; and

f. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 90.0 pounds per hour.

<u>Applicable Compliance Method</u>:

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

HR VOC= (HRTL/1000)(1-C)(LL)

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/1000 gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

LL= (12.46 SPM) / (T+460)

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Methods 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA..

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 21.0 tons per year.

Applicable Compliance Method:

Compliance with the emissions limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

22. P042, Rack C/D 12

Operations, Property and/or Equipment Description:

Rack C/D 12: Loading of lubricant additives, anglamols, gasoline additives, and waste and recovered materials to tank cars. Bay C12 is controlled by a scrubber (AC-3 CScrb) followed by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-09105 (modification effective 9/24/2002)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 47.0 pounds per hour. This short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 8.3 tons per year from emissions unit P042.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

e. Loading of sodium hydro sulfide (a recovered material) at bay C12 of loading rack C/D 12 shall be accomplished in such a manner that all displaced vapors and gases shall be vented to AC-3 CScrb which discharges to AC-12 Fm Inc.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046 and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P042, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility- wide Terms and Conditions apply to this emissions unit.

(3) The permittee shall record daily any time period that all displaced vapors and gases were not vented to AC-3 CScrb followed by AC-12 Fm Inc while loading of sodium hydro sulfide.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 02-09105, issued on September 24, 2002: e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined

d. an identification of each time period that all displaced vapors and gases were not vented to AC-3 CScrb followed by AC-12 Fm Inc while loading of sodium hydro sulfide; and

e. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall also submit annual reports that summarize the following information for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(4) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 47.0 pounds per hour.

<u>Applicable Compliance Method</u>:

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

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

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/1000 gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

LL = (12.46 SPM) / (T+460)

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Methods 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 8.3 tons per year.

Applicable Compliance Method:

Compliance with the emission limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emission limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

23. P044, Rack 200 T/F West

Operations, Property and/or Equipment Description:

Rack 200 T/F West: loading of lubricant additives and gasoline additives to tank trucks.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-09105) modification effective 9/24/2002	See b)(2)a through b)(2)d.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 12.0 pounds per hour. This short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 6.9 tons per year from emissions unit P044.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046 and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous 12-month period, in gallons;

i. the VOC emissions from P044, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046,and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined; and

d. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 12.0 pounds per hour.

Applicable Compliance Method:

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

HR VOC = (HRTL / 1000)(1-C)(LL)

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/ 1000 gal of liquid loaded, and is calculated according to the following equation from AP-42, Section 5.2 (1/95):

LL = (12.46 SPM) / (T+460)

where:

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

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

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

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

If required, compliance shall be demonstrated based uponemissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Methods 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 6.9 tons per year.

Applicable Compliance Method:

Compliance with the emission limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

24. P045, Rack 500 T/F East

Operations, Property and/or Equipment Description:

Rack 500 T/F East: Loading of lubricant additives, anglamols, gasoline additives and waste and recovered materials to tank trucks, controlled by a scrubber (AC-3 CScrb) followed by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-09105 (modification effective 9/24/2002)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 22.0 pounds per hour. This short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 13.0 tons per year from emissions unit P045.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

e. One loading arm is only used for loading of the lubricant additives currently stored in storage tanks 573, 594, 595, 596, 597, 598 and 599, (emissions units T201, T206, T207, T171, T208-210). Loading with this arm shall be accomplished in such manner that all displaced vapors and gases shall be vented to a caustic scrubber (AC-3 CScrb) which discharges to the incinerator (AC-12 Fm Inc). If at any time the material currently stored in storage tanks 573,

594, 595, 596, 597, 598 or 599 is moved to a different storage tank, the emission control system described above must continue to be used while loading from the new storage tank.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046, and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P045, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall record daily any time period that displaced vapors and gases were not vented to the caustic scrubber (AC-3 CScrb) while loading material from storage tanks 573, 594, 595, 596, 597, 598 and 599 (emissions units T201, T206, T207, T171, T208-210).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

d. each time period that displaced vapors and gases were not vented to the caustic scrubber (AC-3 CScrb) while loading material from storage tanks 573, 594, 595, 596, 597, 598 and 599 (emissions units T201, T206, T207, T171, T208-210); and

e. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 22.0 pounds per hour.

<u>Applicable Compliance Method</u>:

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

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

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/ 1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T + 460)$$

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Methods 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 13.0 tons per year.

Applicable Compliance Method:

Compliance with the emission limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

25. P046, Rack 700 T/F East

Operations, Property and/or Equipment Description:

Rack 700 T/F East: Loading of lubricant additives to tank trucks.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-09105) modification effective 9/24/2002)	See b)(2)a through b)(2)d.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 12.0 pounds per hour. This short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 6.9 tons per year from emissions unit P046.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046 and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P046, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined; and

d. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 12.0 pounds per hour.

Applicable Compliance Method:

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

HR VOC = (HRTL/1000)(1-C)(LL)

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/ 1000 gal of liquid loaded, and is calculated according to the following equation:

LL = (12.46 SPM) / (T+460)

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 6.9 tons per year.

Applicable Compliance Method:

Compliance with the emission limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

26. P049, Rack GEN III

Operations, Property and/or Equipment Description:

Rack Gen III: Loading of lubricant additives and gasoline additives to tank trucks.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-09105 (modification effective 9/24/2002)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

b. Volatile organic compound (VOC) emissions shall not exceed 12.0 pounds per hour. This short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. VOC emissions shall not exceed 6.9 tons per year from emissions unit P049.

d. VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

e. All loading of gasoline additives shall be accomplished either through a submerged fill loading line or shall be bottom loaded.

c) Operational Restrictions

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

a. anglamols - 15 million gallons;

b. gasoline additives - 15 million gallons;

c. lubricant additives - 30 million gallons; and

d. waste and recovered materials - 5 million gallons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

(2) The maximum loading losses for materials loaded in P038, P039, P040, P041, P042, P044, P045, P046 and P049 shall not exceed:

a. anglamols - 1.01 lbs VOC/ 1000 gallons loaded;

b. gasoline additives - 2.63 lbs VOC/ 1000 gallons loaded;

c. lubricant additives - 0.626 lb VOC/ 1000 gallons loaded; and

d. waste and recovered material - 1.29 lbs VOC/1000 gallons loaded.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the loading losses (LL) of each liquid loaded, in lb/1000 gal of liquid loaded, and is calculated according to the following equation:

$$LL = (12.46\ SPM) / (T+460)$$

where:

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

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

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

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

f. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

g. the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in gallons;

h. the rolling, 12-month summation of the throughput of each type of liquid from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in gallons;

i. the VOC emissions from P049, in tons;

j. the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, in tons; and

k. the rolling, 12-month summation of the VOC emissions from P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined, for the previous, 12-month period, in tons.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall record daily any time period that loading of gasoline additives was accomplished in a manner other than either through a submerged fill loading line or a bottom loading point.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the annual VOC emission limitation;

b. all exceedances of the rolling, 12-month VOC emission limitation for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

c. all exceedances of the rolling, 12-month throughput limits for each type of liquid for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined;

d. any time period that loading of gasoline additives was accomplished in a manner other than through a submerged fill loading line or a bottom loading point; and

e. all exceedances of the maximum loading losses for each type of liquid.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall also submit annual reports that summarize the following information for emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined:

a. the annual throughput of each type of liquid, in gallons per year; and

b. the total VOC emissions, in tons per year.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

(3) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 12.0 pounds per hour.

Applicable Compliance Method:

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

HR VOC = (HRTL/1000)(1-C)(LL)

where:

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

C = overall control efficiency of the emissions control system (if applicable); and

LL = the loading loss, in lb/ 1000 gal of liquid loaded, and is calculated according to the following equation:

LL = (12.46 SPM) / (T+460)

where:

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

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

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

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

If required, compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A or an alternate U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-09105, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 6.9 tons per year.

Applicable Compliance Method:

Compliance with the emission limitation (YR VOC) shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

VOC emissions shall not exceed 39.95 tons per rolling, 12-month period from emissions units P038, P039, P040, P041, P042, P044, P045, P046 and P049, combined.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-09105 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

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

27. P051, Process AL

Operations, Property and/or Equipment Description:

Production of specialty chemicals using two reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-14125 (effective 8/15/2000)	Volatile organic compound (VOC) emissions shall not exceed 31.08 lbs/batch and 11.34 tons/year. See b)(2)a and b)(2)b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(LL).
b.	OAC rule 3745-21-09(LL)	See b)(2)c and b)(2)e.

(2) Additional Terms and Conditions

a. VOC emissions from the two oxidation reactors and receiver tanks shall be controlled at all times by an incinerator or a flare.

b. The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration

not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) The average combustion temperature within the thermal incinerator shall not be less than 1600 degrees Fahrenheit at all times the emissions unit is in operation.

[Authority for term: PTI 02-14125 and OAC rules 3745-21-09(LL) and 3745-77-07(A)(1)]

(2) The exhaust gas temperature on each of the condensers shall be connected to a high temperature shutdown switch which will stop air flow to the oxidation reactor(s) when activated.

[Authority for term: PTI 02-14125 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 02-14125, issued on August 15, 2000: d)(2) through d)(4). The monitoring and record keeping requirements contained in the above-referenced permit to install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

(2) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

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

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the following emission limitations:

i. 31.08 lbs/batch of VOC emissions, specified in b)(1); and

ii. 11.34 tons/year of VOC emissions, specified in b)(1).

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(4) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for S-4 Flare specified in B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(6) The permittee shall record daily any time period that emissions of VOC from the two oxidation reactors and receiver tanks were not controlled by an incinerator.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 02-14125, issued on August 15, 2000: e)(2), e)(3) and e)(6). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of:

a. the lbs/batch emission limitation for VOC; and

b. the tons per year emission limitation for VOC.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The permittee shall submit deviation (excursion) reports that identify all periods of time during which emissions of VOC from the two oxidation reactors and receiver tanks were not controlled by an incinerator.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping required under d). This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 31.08 lbs/batch.

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factors for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C), and OAC rule 3745-77-07(C)(1)]

b. <u>Emission Limitation</u>:

VOC emissions shall not exceed 11.34 tons/year.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

Applicable Compliance Method:

Compliance shall be demonstrated by the testing requirements specified in f)(2).

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

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

28. P052, Process AM

Operations, Property and/or Equipment Description:

Production of specialty chemicals using eight reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by either a flare (F-4 Flare) or an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

SO_2 emissions are controlled by a scrubber (C-4 CScrb).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(19), d)(20) and e)(8)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-14200 (effective 5/25/2006)	Volatile organic compounds (VOC) emissions shall not exceed the following: 130.8 lbs/day from reactors, holding tanks, feed tanks and filters; 16.14 tons per rolling, 12-month period from reactors and holding tanks; 4.29 tons per rolling, 12-month period from feed tanks; and 4.43 tons per rolling, 12-month period from filters. See b)(2)a and b)(2)b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and are less stringent than OAC rule 3745-21-09(LL).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit. Sulfur dioxide (SO_2) emissions shall not exceed 21.05 lbs/hr and 15.6 tons per year.
b.	OAC rule 3745-31-05(D)	VOC emissions shall not exceed 24.86 tons per rolling, 12-month period from reactors, holding tanks, feed tanks and filters.
c.	OAC rule 3745-21-09(LL)	See b)(2)d through b)(2)f.
d.	OAC rule 3745-18-06(E)	The emission limitation required by this applicable rule is less stringent than the SO_2 emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	40 CFR Part 64 Continuous Emission Monitoring (CAM)	The CAM requirements of 40 CFR Part 64 apply to the SO_2 emissions controlled by C-4 CScrb. See b)(2)i.

(2) Additional Terms and Conditions

a. The VOC emissions from the reactors and holding tanks shall be controlled at all times by an incinerator or a flare. VOC emissions from the feed tanks and filters are not controlled.

b. The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

c. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

d. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

e. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare and F-4 Flare are exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

f. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

g. SO_2 emissions from all of the reactor tanks generated when processing sulfur-containing raw materials shall be controlled by C-4 CScrb prior to exhausting to the flare (F-4 Flare).

This condition is not applicable once C-4 CScrb outlet is directed to AC-12 Fm Inc.

h. The emissions limitation for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.a) of the Facility-wide Terms and Conditions apply to this emissions unit once C-4 CScrb outlet is directed to AC-12 Fm Inc.

i. This emissions unit is a pollutant specific emissions unit for SO_2 according to 40 CFR Part 64 and has developed a CAM plan.

Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a CAM plan for this emissions unit. The permittee shall comply with the provisions of the CAM plan during any operation of the aforementioned emissions unit.

Once C-4 CScrb outlet is directed to AC-12 Fm Inc and monitored by a certified SO_2 CERMS, the emissions unit and scrubber are exempt according to 40 CFR 64.2(b)(1)(vi) and are not subject to the monitoring and record keeping requirements specified in d)(17) and d)(18).

c) Operational Restrictions

(1) The average combustion temperature within the thermal incinerator shall not be less than 1600 degrees Fahrenheit at all times the emissions unit is in operation.

[Authority for term: PTI 02-14200 and OAC rules 3745-21-09(LL) and 3745-77-07(A)(1)]

(2) A pilot flame shall be maintained in the F-4 Flare pilot light burner at all times when the emissions unit is in operation and process vent stream is vented to the flare.

[Authority for term: PTI 02-14200, OAC rule 3745-21-09(LL), and OAC rule 3745-77-07(A)(1)]

(3) Methanol batches shall be limited to 730 per year.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(A)(1)]

(4) The maximum annual number of "solvent-containing" batches, excluding the methanol batches, shall not exceed 2,867, based upon a rolling, 12-month summation of the production rates ("solvent-containing" batches, except methanol-containing products, contain raw materials whose flash points are less than 170 degrees Fahrenheit).

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 02-14200, issued on May 25, 2006: d)(2) through d)(6), and d)(12) through d)(16). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

(2) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

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

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run);

e. records sufficient to demonstrate compliance with the following emission limitations:

i. 16.14 tons per rolling, 12-month period of VOC emissions from reactors and holding tanks, specified in b)(1);

ii. 4.29 tons per rolling, 12-month period of VOC emissions from feed tanks, specified in b)(1);

iii. 4.43 tons per rolling, 12-month period of VOC emissions from filters, specified in b)(1);

iv. 24.86 tons per rolling, 12-month period of VOC emissions from reactors, holding tanks, feed tanks, and filters, specified in b)(1); and

v. 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2).

[Authority for term: OAC rule 3745-77-07(C)(1)]

(4) The permittee shall maintain monthly records of the following information:

a. the number of "solvent-containing" batches;

b. the number of methanol batches;

c. the total number of batches;

d. beginning after the first 12 calendar months of operation following the issuance of the permit to install, the rolling, 12-month summation of the number of "solvent-containing" batches; and

e. the controlled VOC emission rate for "solvent-containing" and "non-solvent-containing" batches (lbs/batch) from the reactors and holding tanks.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

(5) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(6) The monitoring and record keeping requirements for S-4 Flare and F-4 Flare specified in section B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(7) The monitoring and record keeping requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.b) of the Facility-wide Terms and Conditions apply to this emissions unit once the C-4 CScrb outlet is directed to AC-12 Fm Inc.

(8) The permittee shall properly operate and maintain a device to continuously monitor and record the presence of the F-4 Flare pilot flame when the emissions unit is in operation and the process vent stream is vented to the flare. The monitoring device shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee.

The permittee shall record the following information each day when the emissions unit is in operation and the process vent stream is vented to the flare:

a. all periods during which the pilot flame was out; and

b. the operating times for the flare, monitoring equipment, and the associated emissions unit when in operation and venting gases.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

(9) Once the C-4 CScrb outlet is directed to AC-12 Fm Inc, the emissions unit and scrubber are not subject to the monitoring and record keeping requirements specified in d)(11)e and f.

(10) The permittee shall develop emission factors for the amount of SO_2 emitted from the process, either for each final product generated or for each batch run in this emissions unit. The emission factors shall be in units of pounds of SO_2 emitted per kg of final product generated, or pounds of SO_2 emitted per batch.

The SO_2 emission factors and detailed calculations shall be kept on site and available for Ohio EPA review.

If necessary, the permittee shall conduct emission testing, at the request of the Ohio EPA Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(11) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the emission factor for sulfur compound emissions used to determine the amount of SO_2 emitted from the process for each final product generated (in pounds/kg of final product generated or pounds/batch run);

d. the total SO_2 emission rate (in lbs or tons), after controls, from the process unit;

e. the number of hours per batch; and

f. the average hourly SO_2 emission rate for each batch, in pounds per hour, and the maximum lb/hr SO_2 emission rate accounting for the possibility of multiple batches being made simultaneously.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(12) The acceptable operating limitations for the C-4 CScrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber, are the following:

a. the Na_2S and NaOH concentrations of the scrubber liquor shall be greater than zero (0) percent (%); and

b. the scrubber liquor flow rate is not less than 2 gallons per minute.

These levels are effective for the duration of this permit. Any changes in the acceptable levels must be approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the levels based upon information obtained during future SO_2 emission tests that demonstrate compliance with the allowable SO_2 emission rate for this emissions unit. In addition, approved revisions to the levels will not

constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(13) The permittee shall properly operate and maintain equipment to monitor the free Na_2S and NaOH concentrations of C-4 CScrb scrubber liquor and to continuously monitor the scrubber liquor flow rate, in gallons per minute, at all times when the emissions unit is in operation and the process vent stream is vented to the scrubber, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(14) The permittee shall collect and record the following information each day when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. the free Na_2S and NaOH concentrations (percent) of the scrubber liquor (the permittee shall record the percent free Na_2S and NaOH twice per day;

b. the scrubber liquor flow rates, in gallons per minute, at the start of each batch; and

c. the operating times for the capture (collection) system, control device, and monitoring equipment.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(15) Whenever the Na_2S and NaOH concentrations or flow rate deviates from the operating limitations, while the emissions unit is in operation and the process vent stream is vented to the scrubber, the permittee shall promptly investigate the cause of the deviation.

The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began and the magnitude of the deviation at that time;

b. the date(s) the investigation was conducted;

c. the names of the personnel who conducted the investigation; and

d. the findings and recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(16) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the C-4 CScrb above the acceptable operating limitations, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the Na_2S and NaOH concentration and/or flow rate immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(17) The CAM plan for this emissions unit has been developed for SO_2 emissions. The CAM performance indicators for SO_2 are equivalent to the monitoring and record keeping requirements for C-4 CScrb specified in d)(12), d)(13), d)(14), d)(15) and d)(16).

Once C-4 CScrb outlet is directed to AC-12 Fm Inc and monitored by a certified SO_2 CERMS, the emissions unit and scrubber are exempt according to 40 CFR 64.2(b)(1)(vi) and are not subject to the monitoring and record keeping requirements specified in d)(17) and d)(18).

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(18) When the emissions unit is operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

If a CAM indicator is outside of the designated range for more than 5% of the operating time for a reporting period, the Director may require a Quality Improvement Plan for that CAM indicator in accordance with 40 CFR 64.8.

If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA Northeast District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited

to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(19) The permit to install for this emissions unit [P052] was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Stoddard solvent (mineral spirits)

TLV (mg/m3): 525

Maximum Hourly Emission Rate (lbs/hr): 137.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 10,723

MAGLC (ug/m3): 12,500

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack

diameter, etc.). If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

(20) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

[Authority for term: PTI 02-14200 and OAC rule 3745-114]

e) Reporting Requirements

(1) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 02-14200, issued on May 25, 2006: e)(6). The reporting requirements contained in the above-referenced permit to install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of each of the rolling, 12-month emission limitations for VOC emissions from the filters, feed tanks, and reactors and holding tanks;

b. all exceedances of the rolling, 12-month emission limitation for total VOC emissions from the filters, feed tanks, reactors and holding tanks, combined; and

c. all exceedances of the five tons per rolling, 12-month emission limitation for VOC emissions not controlled by an incinerator or flare.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for S-4 Flare and F-4 Flare specified in section B.11.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The permittee shall submit deviation (excursion) reports that identify all periods during which the F-4 Flare pilot flame was not functioning properly while the emissions unit was in operation and the process vent stream was vented to the flare. The reports shall include the date, time, and duration of each such period, as well as the cause of each deviation.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

(6) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of C-4 CScrb, when the emissions unit is in operation and the process vent stream is vented to the scrubber:

a. each period of time when the free Na_2S or NaOH concentrations (percent) of the scrubber liquor or the scrubber liquor flow rate was less than the operating limitations;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the free Na_2S or NaOH concentrations (percent) of the scrubber liquor and scrubber liquor flow rate into compliance with the acceptable levels, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(7) The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the scrubber was not operated during the processing of sulfur-containing raw materials.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

(8) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the “Toxic Air Contaminate Statute”, ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s);

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4), and OAC rule 3745-114-01]

(9) The permittee shall submit a report that identifies any change to the process that changes the worst case scenario for the process. Changes in the worst case scenario could result in compliance testing of the short term pounds per day VOC emission limit or additional monitoring to assure compliance. The report shall be submitted 30 days after the process change.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 02-14200]

(10) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC and SO_2 emissions, in tons, for this emissions unit as determined by record keeping required under d).

This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(11) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 130.8 lbs/day from reactors, holding tanks, feed tanks and filters.

<u>Applicable Compliance Method</u>:

The short term emission limitation for VOC established in b)(1) was established to reflect worst case conditions when operating at or near maximum capacity; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 16.14 tons per rolling, 12-month period from reactors and holding tanks.

Applicable Compliance Method:

Compliance with the stated VOC emission limitation shall be demonstrated by using the results of the emission testing specified in f)(2) and by the record keeping requirements specified in d).

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

VOC emissions shall not exceed 4.29 tons per rolling, 12-month period from feed tanks.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

VOC emissions shall not exceed 4.43 tons per rolling, 12-month period from filters.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

Applicable Compliance Method:

Compliance shall be demonstrated by emission testing using the procedures specified in OAC rule 3745-21-10(C) for AC-12 Fm Inc.

[Authority for term: PTI 02-14200, OAC rule 3745-15-04(A), OAC rule 3745-21-10(C), and OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

VOC emissions shall not exceed 24.86 tons per rolling, 12-month period from reactors, holding tanks, feed tanks and filters.

Applicable Compliance Method:

Compliance with the stated VOC emission limitation shall be demonstrated by using the results of the emission testing specified in f)(2) and by the record keeping requirements specified in d).

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

SO_2 emissions shall not exceed 21.05 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission testing at the egress of C-4 CScrb using the procedures specified in OAC rule 3745-18-04(A) and test Method 6 or 6C of 40 CFR Part 60, Appendix A and by the record keeping requirements specified in d).

[Authority for term: PTI 02-14200, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

h. Emission Limitation:

SO_2 emissions shall not exceed 15.6 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emission testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 or 6C or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

i. Emission limitation:

The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

[Authority for term: PTI 02-14200 and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc specified in B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The testing requirements for SO_2 emissions vented to AC-12 Fm Inc specified in section B.10.d) of the Facility-wide Terms and Conditions apply to this emissions unit once the C-4 CScrb outlet is directed to AC-12 Fm Inc.

(4) Once C-4 CScrb outlet is directed to AC-12 Fm Inc, the emission unit and scrubber are not subject to the testing requirements specified in f)(5) through f)(8).

(5) 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 2.5 years of issuance of the permit;

b. the emission testing shall be conducted to determine the control efficiency C-4 CScrb;

c. 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; and

d. the permittee shall demonstrate that the testing will be performed during the worst case emission conditions.

(6) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

(7) Personnel from the appropriate Ohio EPA District Office or local air agency 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.

(8) 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.

29. P053, Process Z1

Operations, Property and/or Equipment Description:

Production of lubricant additives using two reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.
b.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	The CAM requirements of 40 CFR Part 64 apply to the VOC emissions controlled by AC-12 Fm Inc backed up by S-4 Flare. See b)(2)f.

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d) unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

c. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration

not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

d. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

e. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

f. This emissions unit is a pollutant specific emissions unit for VOC according to 40 CFR Part 64 and has developed a CAM plan.

Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a CAM plan for emissions unit P053. The permittee shall comply with the provisions of the CAM plan during any operation of the aforementioned emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the limitation of five tons per rolling, twelve month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)b.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The CAM plan for this emissions unit has been developed for VOC emissions. The CAM performance indicators for VOC are equivalent to the monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-Wide Terms and Conditions and the monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility-wide Terms and Conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) When the emissions unit is operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

If a CAM indicator is outside of the designated range for more than 5% of the operating time for a reporting period, the Director may require a Quality Improvement Plan for that CAM indicator in accordance with 40 CFR 64.8.

If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA Northeast District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC emission limitation of 5 tons per rolling, 12-month period.

[Authority for term: OAC rule 3745-21-09(LL) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by the record keeping requirements specified in d).

This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-21-10(C)(2), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

30. Loading Rack Group #1: P055, P056, P057, P058, P060, P061, P062, P063, P067, P068 and P071

EU ID	Operations, Property and/or Equipment Description
P055	Rack A/B 1-2-3: Loading of lubricant additives, anglamols, and gasoline additives to tank cars, controlled by a carbon adsorber (R CDrum 2).
P056	Rack A/B 6-7: Loading of lubricant additives and gasoline additives to tank cars.
P057	Rack C/D 4-5: Loading lubricant additives, anglamols, and gasoline additives to tank cars, controlled by a carbon adsorber (R CDrum 1).
P058	Rack Main: Loading of lubricant additives, anglamols, and gasoline additives to tank trucks, controlled by a carbon adsorber (R CDrum 2).
P060	Rack A/B 5: Loading of lubricant additives and gasoline additives to tank cars.
P061	Rack C/D 2-3: Loading of lubricant additives to tank cars.
P062	Rack C 6: Loading of lubricant additives, anglamols, and gasoline additives to tank cars, controlled by carbon adsorber (R CDrum 1).
P063	Rack C/D 7: Loading of lubricant additives, anglamols, and gasoline additives to tank cars, controlled by carbon adsorber (R CDrum 1).
P067	Rack 400 Ball House: Loading of lubricant additives and gasoline additives to tank trucks.
P068	Rack 403 Tank: Loading of lubricant additives to tank trucks.
P071	Misc Bottom Loading: Loading of lubricant additives, anglamols, and gasoline additives to tank cars and tank trucks.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

(2) Additional Terms and Conditions

a. These emissions units are existing sources not required to have a permit to install and with no applicable state or delegated federal requirements.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

31. P073, Process AN

Operations, Property and/or Equipment Description:

Production of specialty chemicals using one reactor systems. The reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-16572 (effective 9/24/2002)	Volatile organic compound (VOC) emissions shall not exceed: 5.37 lbs/batch and 1.0 ton/year from all process vent streams controlled by the incinerator or flare; and 26.8 lbs/batch from all process vent streams not controlled by the incinerator or flare. Sulfur dioxide (SO_2) emissions shall not exceed 10 lbs/day and 1.8 tons/year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(LL).
b.	OAC rule 3745-21-09(LL)	See b)(2)a through b)(2)e.
c.	OAC rule 3745-18-06(E)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

b. The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

c. Total VOC emissions not controlled by an incinerator or flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

d. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

e. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

f. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

g. Any potential SO_2 emissions above deminimis generated when processing sulfur-containing raw materials shall be controlled by the scrubber prior to exhausting to the flare.

The potential SO_2 emissions from this emissions unit are less than 10 pounds per day, therefore, no monitoring, record keeping, reporting or testing requirements are included in this permit.

c) Operational Restrictions

(1) The acceptable average combustion temperature for any 3-hour block of time when the emissions unit is in operation and the process vent stream is vented to the incinerator, is not less than 1,600 degrees Fahrenheit, or shall meet the manufacturer's design specifications for temperature.

[Authority for term: PTI 02-16572 and OAC rules and 3745-21-09(LL) and 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 02-16572, issued on September 24, 2002: d)(3). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

(2) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

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

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of hours per batch;

d. the number of batches run for each final product generated;

e. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

f. records sufficient to demonstrate compliance with the following emission limitations:

i. 5.37 lbs/batch of VOC emissions controlled by an incinerator, specified in b)(1);

ii. 1 ton/year of VOC emissions controlled by an incinerator, specified in b)(1);

iii. 26.8 lbs/batch of VOC emissions not controlled by an incinerator, specified in b)(1); and

iv. 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2).

[Authority for term: OAC rule 3745-21-09(LL), and OAC rule 3745-77-07(C)(1)]

(4) The monitoring and record keeping requirements for AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The monitoring and record keeping requirements for S-4 Flare specified in section B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(6) "The permittee shall develop emission factors for the amount of SO2 emitted from the process, either for each final product generated or for each batch run in this emissions unit. The emission factors shall be in units of pounds of SO2 emitted per kg of final product generated, or pounds of SO2 emitted per batch. The SO_2 emission factors and detailed calculations shall be kept on site and available for Ohio EPA review. If necessary, the permittee shall conduct emission testing, at the request of the Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.

Any changes in the SO_2 emission factors and rates that increase the potential emissions above 10 pounds per day will require scrubber monitoring, record keeping, reporting and testing requirements to be incorporated into this permit by means of a minor permit modification.

[Authority for term: PTI 02-16572 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedance of:

a. the pounds per batch emission limitations for VOC; and

b. the 5 tons per rolling, 12-month period emission limitations for VOC.

[Authority for term: PTI 02-16572 and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility-wide Terms and Conditions apply to this emissions unit

(4) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC and SO_2 emissions, in tons, for this emissions unit as determined by the record keeping requirements specified in d).

This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 5.37 lbs/batch from all process vent streams controlled by the incinerator or flare.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factors for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-16572, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 1.0 ton/year from all process vent streams controlled by the incinerator or flare.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-16572 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

Applicable Compliance Method:

Compliance shall be demonstrated by the testing requirements specified in f)(2).

[Authority for term: PTI 02-16572, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

VOC emissions shall not exceed 26.8 lbs/batch from all process vent streams not controlled by the incinerator or flare.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factors for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-16572, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Total VOC emissions not controlled by an incinerator or flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-16572 and OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

SO_2 emissions shall not exceed 10 lbs/day.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, compliance shall be demonstrated by testing the amount of sulfur produced by this emissions unit prior to the fume incinerator system and flare using a U.S. EPA-approved test method subject to the review and approval of the Ohio EPA Northeast District Office.

[Authority for term: PTI 02-16572 and OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

SO_2 emissions shall not exceed 1.8 tons/year.

Applicable Compliance Method:

This limit is based on the allowable daily emission limitation (10.0 lbs/day) multiplied by the maximum possible operating days (365 days/yr), and divided by 2000 lbs/ton. Therefore, if compliance is shown with the daily emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: PTI 02-16572 and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.

32. P074, Process AO

Operations, Property and/or Equipment Description:

Production of specialty chemicals using two reactor systems. Each reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks and neutralization tanks.

Volatile organic compound (VOC) emissions are controlled by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 02-17449 (modification effective 3/25/2004)	Volatile organic compound (VOC) emissions shall not exceed: 3.5 lbs/batch and 1.0 ton/year from all process vent streams controlled by the incinerator; and 17.5 lbs/batch from all process vent streams not controlled by the incinerator. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(LL). Nitrogen dioxide (NO_2) emissions shall not exceed 25 lbs/batch and 7 tons/year.
b.	OAC rule 3745-21-09(LL)	See b)(2)b through b)(2)g.

(2) Additional Terms and Conditions

a. The VOC emissions from the reactors, filters and holding tanks shall be controlled at all times by an incinerator or a flare. VOC emissions from the material feed tanks are not controlled.

b. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

c. The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

d. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

e. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit

f. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

g. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals that minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) The acceptable average combustion temperature for any 3-hour block of time when the emissions unit is in operation and the process vent stream is vented to the incinerator, is not less than 1,600 degrees Fahrenheit

[Authority for term: PTI 02-17449, OAC rules 3745-21-09(LL) and 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 02-17449, issued on April 3, 2003 and modified on March 25, 2004: d)(2), d)(3) and d)(5). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

(2) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in B.8.a) of the Facility- wide Terms apply to this emissions unit.

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

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run); and

e. records sufficient to demonstrate compliance with the following emission limitations:

i. 3.5 lbs/batch of VOC emissions controlled by an incinerator, specified in b)(1);

ii. 1 ton/year of VOC emissions controlled by an incinerator, specified in b)(1);

iii. 17.5 lbs/batch of VOC from all process vent streams not controlled by the incinerator; and

iv. 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2).

[Authority for term: OAC rule 3745-21-09(LL), and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall develop emission factors for the amount of NO_2 emitted from the flare for each batch run in this emissions unit. The emission factors shall be in units of pounds of NO_2 emitted per batch run.

The NO_2 emission factors and detailed calculations shall be kept on site and available for Ohio EPA review.

If necessary, the permittee shall conduct emission testing, at the request of the Ohio EPA Northeast District Office, during the production of a specific final product to confirm the accuracy of the emission factor.

[Authority for term: PTI 02-17449 and OAC rule 3745-77-07(C)(1)]

(5) Nitrogen dioxide (NO_2) emissions will result from the combustion of nitrogen-containing organic compounds at the incinerator (AC-12 Fm Inc).

The permittee shall collect and record records sufficient to demonstrate compliance with the following emission limitations for each month:

a. 25 lbs/batch of NO_2 emissions, specified in b)(1); and

b. 7 tons/year of NO_2 emissions, specified in b)(1).

[Authority for term: OAC rule 3745-21-09(LL), and OAC rule 3745-77-07(C)(1)]

(6) The monitoring and record keeping requirements AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(7) The monitoring and record keeping requirements for S-4 Flare specified in B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the

a. pounds per batch emission limitations for VOC; and

b. 5 tons per rolling, 12-month period emission limitation for VOC.

[Authority for term: PTI 02-17449 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the pounds per batch and tons per year emission limitations for NO_2.

[Authority for term: PTI 02-17449 and OAC rule 3745-77-07(C)(1)]

(3) The reporting requirements for AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC and NO_2 emissions, in tons, for this emissions unit as determined by the record keeping requirements specified in d).

This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

VOC emissions shall not exceed 3.5 lbs/batch from all process vent streams controlled by the incinerator.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factors for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-17449, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

VOC emissions shall not exceed 1.0 ton/year from all process vent streams controlled by the incinerator.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-17449 and OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

VOC emissions shall not exceed 17.5 lbs per batch from all process vent streams not controlled by the incinerator.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factors for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or

25A, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

[Authority for term: PTI 02-17449, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a).

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-17449 and OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

NO_2 emissions shall not exceed 25 lbs/batch.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-17449 and OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

NO_2 emissions shall not exceed 7 tons/year.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

[Authority for term: PTI 02-17449 and OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

The incinerator shall reduce VOC emissions by at least 98%, by weight, at all times, as determined by paragraph OAC rule 3745-21-10(C).

Applicable Compliance Method:

Compliance shall be demonstrated by the testing requirements specified in f)(2).

[Authority for term: PTI 02-17449, OAC rule 3745-15-04(A), and OAC rule 3745-77-07(C)(1)]

(2) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-Wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

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

33. P075, Rack 200 Ball House

Operations, Property and/or Equipment Description:

Rack 200 Ball House: Loading of lubricant additives, anglamols, and gasoline additives to tank trucks.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3) PTI P0105269 (effective 9/30/2009)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for this air contaminant is less than 10 tons/year.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) PTI P0105269 (effective 9/30/2009)	Volatile organic compound (VOC) emissions shall not exceed 29.4 pounds per day and 5.4 tons per year. See b)(2)b and b)(2)c.
c.	OAC rule 3745-31-05(F)	See b)(2)b and b)(2)c.

(2) Additional Terms and Conditions

a. The following terms and conditions shall become void as BAT after U.S. EPA approves the rule revision but shall remain effective under OAC rule 3745-31-05(F):

b)(1)b, b)(1)c, d)(1) and e)(1).

b. The permittee shall prevent liquid drainage from the loading arm when it is not in use or accomplish complete drainage before the loading arm is disconnected.

c. The short term emission limitation for VOC was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month:

a. the loading method for each liquid loaded;

b. the true vapor pressure of each liquid loaded, in psia;

c. the molecular weight of vapors of each liquid loaded, in lb/lb-mol;

d. the bulk temperature of each liquid loaded, in degrees Fahrenheit;

e. the method of VOC destruction used for each liquid loaded and the estimated overall VOC control efficiency (if applicable), in percent;

f. the throughput of liquid, combined, in gallons; and

g. the VOC emissions, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit an annual report, by April 15 of each year for the preceding calendar year that specifies the annual VOC emissions, in tons, for this emissions unit as determined by the record keeping requirements specified in d).

This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 29.4 pounds per day.

Applicable Compliance Method:

Compliance with the daily VOC emissions limit (D VOC) shall be determined by the summation of VOC emission from maximum daily gasoline additive loadout and maximum daily lubricant additive loadout as calculated by the following equation:

$$D\ VOC = \Sigma\ (DTL/1000)(LL)_i$$

where:

DTL = maximum throughput of liquid, in gal/day (42,000 gallons per day of gasoline additive and 26,000 gallons per day of lubricant additive); and

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

$$LL_i = (12.46\ S_i\ P_i\ M_i\ /\ T_i)$$

where:

S = saturation factor from AP-42 (1/95) Table 5.2.1, Saturation(s) Factors for Calculating Petroleum Liquid Loading Losses, (1.45, saturation factor for splash filling, and 0.5, saturation factor for submerged fill);

P = true vapor pressure of the liquid, in psia, (0.2 psia for gasoline additive and 0.1 psia for lubricant additive);

M = molecular weight of vapors, in lb/lb-mol, (105 lb/lb-mole for gasoline additive and 250 lb/lb-mole for lubricant additive); and

T = bulk temperature of liquid loaded, in degrees Rankin, (550° for gasoline additive and 610° for lubricant additive).

b. Emission Limitation:

VOC emissions shall not exceed 5.4 tons per year.

Applicable Compliance Method:

Compliance with the emissions limit (YR VOC) shall be demonstrated by the record keeping requirements specified in d) and the following equation:

$$YR\ VOC = [(V_1) * (LL_1) + (V_2) * (LL_2)] * (365\ days/yr)*(ton/2000\ lbs)$$

where:

V_1= the gallons of gasoline additive loaded per day at this loading rack, the maximum is 42,000 gal/d;

LL_1 = the gasoline additive loading loss, the worst case is 0.238 lb/1000 gal loaded;

V_2 = the gallons of lubricant additive loaded per day at this loading rack, the maximum is 26,000 gal/d; and

LL_2 = the lubricant additive loading loss, the worst case is 0.746 lb/1000 gal loaded.

g) Miscellaneous Requirements

(1) None.

34. P124, Process AP

Operations, Property and/or Equipment Description:

Production of lubricant additives using one reactor system. The reactor system may contain all or some of the following: reactors, filters, filter tanks, finish tanks, receiver tanks, feed tanks, mix tanks, holding tanks, decanter tanks, charging tanks, drying tanks, and neutralization tanks.

Volatile organic compounds (VOC) emissions are controlled by an incinerator (AC-12 Fm Inc) backed up by an emergency flare (S-4 Flare).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3) as effective 11/30/01 P0108194 (effective 8/22/2011)	Nitrogen oxide (NO_x) emissions shall not exceed 1.50 lbs/hr and 6.57 tons per year from each incinerator. Carbon monoxide (CO) emissions shall not exceed 1.26 lbs/hr and 5.52 tons per year from each incinerator. VOC emissions shall not exceed 0.3 lb/hr and 1.2 tons per year from Process AP after controls. See b)(2)a, b)(2)b and b)(2)c.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06 P0108194 (effective 8/22/2011)	NO_x emissions shall not exceed 1.50 lbs/hr and 6.57 tons per year from each incinerator. CO emissions shall not exceed 1.26 lbs/hr and 5.52 tons per year from each incinerator. See b)(2)b and b)(2)d.
c.	OAC rule 3745-21-09(LL)	See b)(2)e through b)(2)i.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 31, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

b. The short term emission limitations for NO_x and CO from each incinerator was established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

c. The short term emission limitations for VOC were established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) does not apply to the VOC emissions emitted by the Process AP since the potential to emit after controls is less than 10 tons/year.

e. The VOC emissions shall be controlled by an incinerator that meets the requirements of paragraph OAC rule 3745-21-09(LL)(1)(a), or a flare that meets the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d), unless otherwise exempted by OAC rule 3745-21-09(LL)(3).

f. Total VOC emissions not controlled by an incinerator or a flare shall not exceed 5 tons per rolling, 12-month period, pursuant to OAC rule 3745-21-09(LL)(3)(a). The total VOC emissions not controlled by an incinerator or a flare shall be based on the emissions from all process vent streams.

g. The incinerator shall be designed and operated as follows:

i. The incinerator shall reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight, or shall emit VOC at a concentration not exceeding 20 parts per million by volume (dry basis), either of which is determined under OAC rule 3745-21-10(C); or

ii. The incinerator shall provide a minimum residence time of 0.75 second at a minimum temperature of 1600 degrees Fahrenheit.

h. Pursuant to OAC rule 3745-21-09(LL)(3)(b), the S-4 Flare is exempt from the requirements in OAC rule 3745-21-09(LL)(1)(b) because the flare was installed prior to May 25, 1988.

i. Any process wastewater shall be discharged to a wastewater separator that has all separator sections equipped with covers and seals which minimize the amount of VOC exposed to the ambient air.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The monitoring and record keeping requirements for determining uncontrolled VOC emissions specified in section B.8.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

[Authority for term: P0108194 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall collect and record the following information for each month:

a. the company identification of each final product generated;

b. the quantity of each final product generated, in kg;

c. the number of batches run for each final product generated;

d. the minimum cycle time for each final product;

e. the emission factors used to determine the amount of VOC emitted for each final product generated (in lbs of VOC/kg of final product generated or lbs of VOC/batch run);

f. records sufficient to demonstrate compliance with the limitation of 5 tons per rolling, 12-month period of VOC emissions not controlled by an incinerator or flare, specified in b)(2)(f); and

g. records sufficient to demonstrate compliance with the limitation of 1.2 tons per year of VOC emissions from Process AP after controls.

[Authority for term: P0108194 and OAC rule 3745-77-07(C)(1)]

(3) The monitoring and record keeping requirements for the AC-12 Fm Inc specified in section B.9.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

[Authority for term: P0108194 and OAC rule 3745-77-07(C)(1)]

(4) The monitoring and record keeping requirements for S-4 Flare specified in B.11.a) of the Facility-wide Terms and Conditions apply to this emissions unit.

(5) A pilot flame shall be maintained in the flare's pilot light burner at all times the process vent stream is vented to the flare when the emissions unit is in operation.

The permittee shall properly operate, and maintain equipment to continuously monitor and record the presence of a pilot flame when the emissions unit is in operation and the process vent stream is vented to the flare, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s) with any modifications deemed necessary by the permittee.

The permittee shall record the following information each day when the emissions unit is in operation and the process vent stream is vented to the flare:

a. all periods during which there was no pilot flame; and

b. the operating times for the flare, monitoring equipment, and the associated emissions unit.

Whenever the monitoring indicates that there is no pilot flame while the emissions unit is in operation and the process vent stream is vented to the flare, the permittee shall promptly investigate the cause of the deviation.

[Authority for term: P0108194 and OAC rule 3745-77-07(C)(1)]

(6) In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment above the acceptable operating limitation, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

[Authority for term: P0108194 and OAC rule 3745-77-07(C)(1)]

(7) The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the results of the monitoring immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[Authority for term: P0108194 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all exceedances of the 5 tons per rolling, 12-month emission limitation for VOC.

[Authority for term: P0108194 and OAC rule 3745-77-07(C)(1)]

(2) The reporting requirements for the AC-12 Fm Inc specified in section B.9.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(3) The reporting requirements for S-4 Flare specified in section B.11.b) of the Facility-wide Terms and Conditions apply to this emissions unit.

(4) The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the flare pilot flame was not functioning properly while the emissions unit is in operation and the process vent stream was vented to the flare. The reports shall include the date, time, and duration of each such period, as well as the cause of each deviation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) The permittee shall submit an annual report, by April 15 of each year, for the preceding calendar year that specifies the annual VOC emissions for this emissions unit (as determined by record keeping requirements specified in d). This reporting obligation may be satisfied by the fee emissions report submitted by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

VOC emissions shall not exceed 5 tons of VOC per rolling, 12-month period from all process vent streams not controlled by an incinerator(s) or flare.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in d).

If required, the emission factor for a final product shall be determined by emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or 25A, or, an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

b. Emission Limitations:

NO_x emissions shall not exceed 1.50 lbs/hr and 6.57 tons per year from each incinerator.

Applicable Compliance Method:

Compliance with the hourly limitation shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) for natural gas combustion and the maximum input capacity of the gas burners.

$E(NO_x)$ = (15 mmBtu/hr) * [(100 lbs/mm scf) / (1,000 Btu/scf)]

If required, the compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (1.50 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

c. Emission Limitations:

CO emissions shall not exceed 1.26 lbs/hr and 5.52 tons per year from each incinerator.

Applicable Compliance Method:

Compliance with the hourly limitation shall be based on a one time calculation by using emission factors from AP-42, Section 1.4 (1998) for natural gas combustion and the maximum input capacity of the gas burners.

E(CO) = (15 mmBtu/hr) * [(84 lbs/mm scf) / (1,000 Btu/scf)]

If required, the compliance shall be demonstrated based upon emissions testing performed in accordance with the methods and procedures specified in 40 CFR

Part 60, Appendix A, Methods 1 through 4 and Method 10, or an alternative U.S. EPA-approved test method with prior approval from the Ohio EPA.

The annual emission limitation was developed by multiplying the short-term allowable CO emission limitation (1.26 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

d. Emission Limitations:

VOC emissions shall not exceed 0.3 lb/hr and 1.2 tons per year from the Process AP after controls.

Applicable Compliance Method:

Compliance with the hourly emission limitations shall be determined by use of the Emission Inventory Improvement Program Guidance Document, Volume II, Chapter 16: Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, or other emission calculator approved by the Ohio EPA, and control efficiency determined during the most recent incinerator compliance demonstration and the manufacturer's guaranteed control efficiency of the flare.

Compliance with the annual emission limitation shall be demonstrated by summation of the monthly VOC emissions from the incinerator or flare recorded according to d)(2)g for the calendar year.

e. Emission Limitation:

Unless exempted by OAC rule 3745-21-09(LL)(3)(b), the flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

(2) The testing requirements for AC-12 Fm Inc specified in section B.9.c) of the Facility-wide Terms and Conditions apply to this emissions unit.

g) Miscellaneous Requirements

(1) None.