State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.ohio.gov

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

1/11/2010

Certified Mail
Facility ID: 1431350064
Permit Number: P0105169
County: Hamilton

Ronald Garcia
Agrium North Bend Nitrogen Operations
10743 Brower Rd.
P.O. Box 158
North Bend, OH 45052-0158

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

Dear Permit Holder:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 11/19/2009. 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 has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.ohio.gov/dapc in Microsoft Word and Adobe Acrobat format. 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
Columbus, Ohio 43215

and

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660

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,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Hamilton County Dept. of Environmental Services

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

PRELIMINARY PROPOSED

Air Pollution Title V Permit
for
Agrium North Bend Nitrogen Operations

Facility ID: 1431350064
Permit Number: P0105169
Permit Type: Renewal
Issued: 1/11/2010
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Title V Permit
for
Agrium North Bend Nitrogen Operations

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Authorization

Facility ID: 1431350064
Facility Description: Production of agricultural fertilizers and industrial chemicals.
Application Number(s): A0037605
Permit Number: P0105169
Permit Description: Per Consent Decree 1:07CV089 signed between Agrium US Inc. and USDOJ, Title V permit must be revised to include new SCR NOx reduction project implementation.
Permit Type: Renewal
Issue Date: 1/11/2010
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number:

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

Agrium North Bend Nitrogen Operations
10743 Brower Rd.
P.O. Box 158
North Bend, OH 45052-0158

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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 Hamilton County Dept. of Environmental Services. 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 (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
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

(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
(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 recordings for 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 (i.e., postmarked) 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) constitutes a violation of an emission limitation (or control requirement) and, therefore, 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 scheduled maintenance, 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 promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency 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."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Hamilton County Dept. of Environmental Services.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. 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) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition 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 contaminent 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 appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(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 appropriate Ohio EPA District Office or local air agency) 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 (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

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

(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 appropriate Ohio EPA District Office or local air agency with written notification within

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

No emissions unit certified 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 opening 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 the appropriate Ohio EPA District Office or local air agency.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (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 appropriate Ohio EPA District Office or local air agency. 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 (i.e., postmarked) 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

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.
(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 (i.e., postmarked) 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 potentials to emit; or

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

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

F001	Truck, railcar, and sack unloading
F002	Roadways and parking areas
F003	Material handling
J004	98% Strong Acid Unloading Rack
J005	Rail Car Loading Rack
L001	15 gallon solvent cold cleaner
P003	1.4 MMBtu/hr Diesel engine. (PTI 14-04064)
P004	Acid Plant Vaporizer
P005	Neutralizer Vaporizer
P006	Duke Ammonia Bottle
P007	125 BPH Diesel-fired emergency fire water pump
P008	40 kW electric generator
P014	laboratory solvent usage
P015	portable gasoline-powered pump
P016	Large Cooling Tower
P017	Sanitary System with Digester
T002	40,108 Gal. Fixed Roof Storage Tank w/Vapor Recovery (PTI 14-04064)
T004	Ammonium Nitrate Storage Tank
T005	Urea Dissolving Tank
T006	#1 Batch Tank
T007	#2 Batch Tank
T008	#3 Batch Tank
T009	Strong Liquor Tank
T010	50% Peroxide Tank
T011	93% Sulfuric Acid Storage
T012	Scrubber Water Hold Tank
T013	East Scrubber Water Hold Tank
T014	West Scrubber Water Hold Tank
T015	25,000 Gallon Fixed Roof Nitric Acid Storage Tank
T016	25,000 Gallon Fixed Roof Nitric Acid Storage Tank
T017	16,000 Gallon Fixed Roof Nitric Acid Storage Tank
T018	51,000 Gallon Fixed Roof Nitric Acid Storage Tank
T019	7,000 Gallon Fixed Roof Nitric Acid Storage Tank
T020	1000 gallon unleaded gasoline dispensing tank (T-53)
T021	20,000 gallon No. 2 fuel oil above ground storage tank
T022	18,000 gallon No. 2 fuel oil above ground storage tank
T023	1.9 MM gallon UAN tank
T024	1.1 MM gallon UAN tank
T026	455,300 gallon fixed roof storage tank

Each insignificant emissions unit at this facility must comply with all applicable state and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

3. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirement (as defined in OAC rule 3745-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

B002	less than 1 MMBtu/hr natural gas fired heaters
B003	Less than 1 MMBtu/hr kerosene-fired heater
B004	Less than 1 MMBtu/hr gas-fired hot water tanks
B005	Less than 1 MMBtu/hr gas-fired heaters
B006	Less than 1 MMBtu/hr gas-fired heater
P009	Maintenance cutting equipment
P010	Maintenance welding equipment
P011	Maintenance welding equipment
P012	Maintenance welding equipment
P013	Maintenance welding equipment
T027	500-gallon Kerosene Storage Tank
T028	280 gallon fixed roof storage tank
T029	285 gallon fixed roof storage tank
T030	44 gallon fixed roof storage tank

4. 40 CFR Part 68 is an applicable requirement for this facility. The permittee shall comply with the Risk Management Plan submitted to the Hamilton County Department of Environmental Services

C. Emissions Unit Terms and Conditions

1. B001, Gas/Oil Boiler

Operations, Property and/or Equipment Description:

48.8 MMBtu/hr natural gas/number two oil fired boiler

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)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.
b.	OAC rule 3745-17-10(B)(1)	The particulate emissions from this emissions unit shall not exceed 0.020 lb per MMBtu of actual heat input.
c.	OAC rule 3745-18-06(C)	The emission of sulfur dioxide (SO2) from this emissions unit shall not exceed 1.6 lbs per MMBtu of actual heat input.

(2) Additional Terms and Conditions

None

c) Operational Restrictions

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

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

(2) The quality of the number two fuel oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.

(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 the records specified in either Option 1 or Option 2 below to document the quality of the fuel oil burned in this emission unit.

Option 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, D5453 Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil, or equivalent methods as approved by the Director..

Option 2

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, D5453 Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil, or equivalent methods as approved by the Director.

(Authority for term: OAC rules OAC 3745-18-04, and 3745-77-07(C)(1))

e) Reporting Requirements

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

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

(2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record which shows a deviation from the allowable sulfur dioxide emission limitation contained in this permit, based upon the sulfur dioxide emission rates calculated in accordance with the formula specified in OAC rule 3745-18-04(F). The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

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

f) Testing Requirements

(1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitations:

0.020 lb of PE/MMBtu of actual heat input.

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the maximum natural gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs of filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable compliance method when burning fuel oil:

For the use of fuel oil, compliance may be determined by multiplying the maximum fuel oil usage rate of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs of filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

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

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

b. Emission Limitations:

1.60 lb of SO2/MMBtu of actual heat input.

Applicable compliance method when burning number two fuel oil:

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by the emission rate calculations collected and recorded in d)(2).

Applicable compliance method when burning only natural gas:

For the use of natural gas, compliance may be determined by multiplying the hourly gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb of SO2/MM cu. ft and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

(Authority for term: OAC rules 3745-18-04 and 3745-77-07(C)(1))

c. Emission Limitation:

Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

2. J001, Truck Loading Rack for Ammonia Products

Operations, Property and/or Equipment Description:

Truck loading rack for ammonia products with packed bed scrubber

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 14-05706)	Ammonia emissions shall not exceed 0.18 lb/hr*. Ammonia emissions shall not exceed 0.43 ton/yr. *The hourly ammonia emission limit is based on the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, reporting, or test requirements are necessary to demonstrate compliance with this emission limitation. See b)(2)a, b)(2)b, and c(1)-c(3).
b.	OAC rule 3745-17-07(A)	The emissions of ammonia are in a gaseous form. There are no visible particulate emissions from this emission unit.
c.	OAC rule 3745-17-11(B)	The emissions of ammonia are in a gaseous form. There are no particulate emissions from this emission unit.

(2) Additional Terms and Conditions

a. The amount of material throughput this emission unit shall not exceed the following limitations:

i. anhydrous ammonia - 390,000,000 gallons per year;

ii. aqueous ammonia - 15,000,000 gallons per year;

iii. urea ammonium nitrate - 75,300,000 gallons per year; and,

iv. ammonium nitrate - 22,500,000 gallons per year.

b. All emissions from this emissions unit shall be vented to a packed bed scrubber when loading aqueous ammonia or anhydrous ammonia.

c) Operational Restrictions

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall be between 0.5 to 1.5 inches of water.

(Authority for term: OAC rules 3745-31-05(A)(3) and (3745-77-07(C)(1))

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 200 gallons per minute.

(Authority for term: OAC rule rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pH of the scrubber liquid, that shall be maintained in order to demonstrate compliance, is between 0.1 and 5.

(Authority for term: OAC rule rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate on a once per shift basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, 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;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and,

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, 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:

f. a description of the corrective action;

g. the date the corrective action was completed;

h. the date and time the deviation ended;

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

j. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and,

k. the name(s) 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable PE emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit 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 rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) The permittee shall collect and record monthly records for the amount of throughput for each product identified in b)(2)a. In addition to the monthly throughput total, each month the permittee shall maintain the year-to-date (based on the calendar year) throughput totals for each product loaded through this emissions unit.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(3) 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 14-05706: d)(1)-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.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports for the following information:

a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber as required in b)(2)b;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop, liquid flow rate, and/or scrubber liquid pH into compliance with the acceptable range, was determined to be necessary and was not taken;

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit; and,

f. any exceedance of the throughput limitations specified in b)(2)a.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) 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 14-05706: e)(1). 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.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.18 lb/hr of Ammonia.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance may be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-05706 submitted April 4, 2005.

b. Emission Limitation:

0.43 TPY of Ammonia.

Applicable Compliance Method:

Compliance may be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-05706 submitted April 4, 2005.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) Compliance with the throughput restrictions in b)(2)a may be demonstrated by the information collected and recorded in d)(5).

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05706: f)(1)-f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

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.

3. J002, Truck Loading Rack for Nitric Acid

Operations, Property and/or Equipment Description:

Truck loading rack for nitric acid with packed bed scrubber

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 14-4042)	Particulate emissions (PE) and PE less than or equal to 10 microns (PM10) shall not exceed 0.54 lb/hr*. Particulate emissions (PE) and PE less than or equal to 10 microns (PM10) shall not exceed 0.71 TPY. * The hourly PE/PM10 (emitted as nitric acid) emission limit is based on the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, reporting, or test requirements are necessary to demonstrate compliance with this emission limitation. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). See b)(2)a and b)(2)b.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this 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 amount of nitric acid throughput in this emission unit shall not exceed 22,200,000 gallons per year

b. All emissions from this emissions unit shall be vented to a packed bed scrubber.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall be between 0.5 to 1.5 inches of water.

(Authority for term: OAC rule s 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 200 gallons per minute.

(Authority for term: OAC rule s 3745-31-05(A)(3) and 3745-77-07(C)(1))

(3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pH of the scrubber liquid, that shall be maintained in order to demonstrate compliance, is between 0.1 and 5.

(Authority for term: OAC rule s 3745-31-05(A)(3) and 3745-77-07(C)(1))

(4) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate on a once per shift basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, 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;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, 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:

f. a description of the corrective action;

g. the date the corrective action was completed;

h. the date and time the deviation ended;

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

j. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and

k. the name(s) 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable PE emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit 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 s 3745-31-05(A)(3) and 3745-77-07(C)(1))

(5) The permittee shall collect and record monthly records for the amount of nitric acid throughput for this emission unit. In addition to the monthly throughput total, each month the permittee shall maintain the year-to-date (based on the calendar year) throughput totals for nitric acid.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(6) 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 14-04042: d)(1)-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.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports for the following information:

a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber as required in b)(2)b;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop, liquid flow rate, and/or scrubber liquid pH into compliance with the acceptable range, was determined to be necessary and was not taken;

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit; and

f. any exceedance of the throughput limitation specified in b)(2)a.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) 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 14-04042: e)(1)). 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.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.54 lb/hr of PM/PM10.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance may be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-4042 submitted January 29, 1996.

If required, the permittee shall demonstrate compliance with the lb/hr emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

b. Emission Limitation:

0.71 TPY of PM/PM10.

Applicable Compliance Method:

Compliance may be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 14-4042 submitted January 29, 1996.

c. Emission Limitation:

Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

(2) Compliance with the throughput restrictions in b)(2)a may be demonstrated by the information collected and recorded in d)(5).

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04042: f)(1)-f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

4. J003, Barge Unloading

Operations, Property and/or Equipment Description:

UAN barge unloading

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)(2)-d)(5), and e)(2).

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 14-05676)	Ammonia emissions shall not exceed 0.38 lb/hr* Ammonia emissions shall not exceed 1.66 ton/y* * The hourly and TPY ammonia emission limit is based on the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, reporting, or test requirements are necessary to demonstrate compliance with this emission limitation. See c)(1).
b.	OAC rule 3745-114-01	See d)(2)-d)(5), and e)(2).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) Concurrent unloading of barges is prohibited for this emissions unit.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1))

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record daily records for all periods of concurrent unloading of barges.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) The Permit to Install 14-05676 application for this emissions unit(s), J003, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4\ TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant(s):

Toxic Contaminant: Ammonia

TLV (mg/m3): 17,400

Maximum Hourly Emission Rate (lbs/hr): 0.38.

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 177

MAGLC (ug/m3): 414

The permittee, has demonstrated that emissions of 0.38 lb ammonia, from emissions unit J003, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule, 3745-114-01, and Option A, Engineering Guide #70)

(3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, 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 new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final Permit to Install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(Authority for term:ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, and Option A, Engineering Guide #70)

(4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, and Option A, Engineering Guide #70)

(5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, and Option A, Engineering Guide #70)

(6) 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 14-05676: d)(1)-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.

e) Reporting Requirements

(1) The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which concurrent unloading of barges occurred. This report shall identify the estimated total quantity of emissions during each hour of such

day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(3) 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 14-05676: e)(1)-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.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitations:

0.38 lb/hr, 1.66 tons/yr ammonia.

Applicable Compliance Method:

Emissions shall be calculated and compliance determined by using the following equations:

Lbs/hr = (A) x (B)

Tons/yr = (A) x (B) x (C) x (1 ton/2000 lbs)

Where,

A = Emission factor, lbs/1000 gallons unloaded, calculated from AP-42 Section 5.2, equation 1, (January, 1995).

B = Amount of material unloaded, gallons per hour.

C = Annual hours operated.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(2) Compliance with the operational restriction in c)(1) may be demonstrated by the information collected and recorded in d)(1).

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-05676: f)(1)-f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

5. P001, Nitric Acid Plant

Operations, Property and/or Equipment Description:

Nitric acid plant with SCR

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)(9)-d)(12), and e)(3).

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(F) (PTI P0103851)	Nitrogen Oxides (NOx) emissions shall not exceed 32.33 TPY. See c)(1).
b.	40 CFR Part 60.72(a)(2)	See b)(2)a.
c.	40 CFR Part 60.72(a)(1)	The emission limitation specified by this regulation is less stringent than the emission limitation established pursuant to DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089.
d.	Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio	See b)(2)c., b)(2)d., b)(2)g. and (c)(1).
e.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60.72(a)(2).
f.	OAC 3745-114-01	See d)(9) through d)(12).

(2) Additional Terms and Conditions

a. Visible emissions shall not exhibit 10 percent opacity or greater.

b. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

c. Nitrogen Oxides (NOx) emissions shall not exceed 1.0 pound of NOx (expressed as NO2) per ton of 100 percent nitric acid produced averaged over 3 rolling hours of operating time. This short term limit shall not apply during periods of startup, shutdown or malfunction of the Nitric Acid Plant or during malfunction of the selective catalytic reduction (SCR), provided that during such periods the permittee implements good air pollution control practices.

d. Nitrogen Oxides (NOx) emissions shall not exceed 0.61 pound of NOx (expressed as NO2) per ton of 100 percent nitric acid produced averaged over all operating hours in a rolling 365 day period. This requirement shall apply at all times the nitric acid plant is in operation. Compliance with this requirement shall first be demonstrated 365 days after the date the emission limitation becomes applicable.

e. The permittee shall record the daily production rate and hours of operation.

f. Compliance with OAC rule 3745-31-05(F) shall be demonstrated by compliance with the mass emission limitation and the use of selective catalytic reduction control technology.

g. The requirements established Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio under shall not be relaxed.

c) Operational Restrictions

(1) The permittee shall operate a selective catalytic reduction device for controlling NOx emissions on this emissions unit.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(A)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

d) Monitoring and/or Recordkeeping Requirements

(1) Tthe permittee shall install and make operational a NOx Continuous Emissions Monitoring System (CEMS) on this emissions unit. Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the CEMS shall operate at all times during operation of the nitric acid plant.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

(2) The CEMS shall consist of equipment necessary to monitor the NOx concentration in the main stack, or the NOx concentration of the gas stream to the main stack if an aspirating stack is used, and the NOx concentration in any bypass stack.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

(3) The CEMS shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR 60.11, 60.13, Part 60, Appendix B, Performance Specification 2, and Part 60, Appendix F, Procedure 1.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

(4) The NOx CEMS shall monitor and record the NOx concentration (in parts per million) and 3-hour average NOx emission rate in units of lbs/ton from the nitric acid plant. The CEMS shall also monitor and record the rolling 365 day average NOx emission rate from the nitric acid plant in units of lbs/ton.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

(5) The CEMS shall be used to demonstrate compliance with the emission limits established in b)(2).

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

(6) Consistent with 40 CFR Part 60, Appendix F, the permittee shall take all steps necessary to avoid CEMS breakdowns and minimize downtime. This shall include, but is not limited to, operating and maintaining the CEMS in accordance with best practices and maintaining an on-site inventory of spare parts or other supplies necessary to make rapid repairs of the equipment.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

(7) In the event of CEMS downtime lasting longer than 24 hours, the permittee shall demonstrate compliance with the emission limits in b)(2) by implementing an alternative monitoring procedure. This procedure shall involve making physical measurements of the NOx concentration in the gas stream to the main stack. These measurements shall be collected and analyzed once every three hours until the CEMS resumes operation, and these measurements must be recorded and included in the 365 day rolling average NOx emission calculation.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

(8) The permit-to-install application for this emissions unit, P001, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The “Toxic Air Contaminant Statute”, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed

for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   $$TLV/10 \times 8/X \times 5/Y = 4\ TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: ammonia

   TLV (mg/m3): 17.43

   Maximum Hourly Emission Rate (lbs/hr): 0.72

   Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 10.57

   MAGLC (ug/m3): 415

The permittee, has demonstrated that emissions of ammonia, from emissions unit P001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule, 3745-114-01, and Option A, Engineering Guide #70)

(9) Prior to making any physical changes to or changes in the method of operation of the emissions unit, that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, 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 new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule, 3745-114-01, and Option A, Engineering Guide #70)

(10) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule, 3745-114-01, and Option A, Engineering Guide #70)

(11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule, 3745-114-01, and Option A, Engineering Guide #70)

(12) 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 Number P0103851: d)(1)-d)(12). 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.

e) Reporting Requirements

(1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

(Authority for Term: OAC rule 3745-77-07(C)(1), and 40 CFR 60.7)

(2) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

(Authority for term: ORC 3704.03(F)(3)(c) and F(4), OAC rule, 3745-114-01, and Option A, Engineering Guide #70)

(3) 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 Number P0103851: e)(1)-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.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Visible particulate emissions shall not exhibit 10 percent opacity or greater.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1), 3745-31-05(A)(2), and 3745-77-07(C)(1))

b. Emission Limitation:

Nitrogen Oxides (NOx) emissions shall not exceed 32.33 TPY.

Nitrogen Oxides (NOx) emissions shall not exceed 0.61 pound of NOx (expressed as NO2) per ton of 100 percent nitric acid produced averaged over all operating hours in a rolling 365 day period.

Applicable Compliance Method:

Compliance shall be determined through the continuous emissions monitoring required by d)(1) through d)(8).

c. Emission Limitation:

Nitrogen Oxides (NOx) emissions shall not exceed 1.0 pound of NOx (expressed as NO2) per ton of 100 percent nitric acid produced averaged over 3 rolling hours of operating time.

Applicable Compliance Method:

Compliance shall be determined through the continuous emissions monitoring required by d)(1) through d)(8).

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

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

The emission testing shall be conducted within 6 months of permit expiration.

The emission testing shall be conducted to demonstrate compliance with the allowable emission rate of NOx in b)(2)c.

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

Method 7 of 40 CFR Part 60, Appendix A, or approved alternative methods.

The test must consist of at least 9 reference method test runs conducted during periods of representative performance of the nitric acid plant and may serve as the CEMS relative accuracy test required under Performance Specification 2 in Part 60, Appendix B In order to develop the conversion factors required within this term, at least 3 reference method test runs must be conducted during the production of each Strong Acid (defined as nitric acid 67% or greater in strength) and Weak Acid (defined as nitric acid less than 67% in strength). The permittee shall take all steps necessary to assure accurate measurements of 100% nitric acid production during each test run.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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).

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.

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.

During emission testing, the permittee shall establish conversion factors for the purpose of converting monitoring data, in terms of NOx concentration, into terms of mass of NOx per unit of acid production. A separate conversion factor shall be established for production of strong acids (defined as nitric acid 67% or greater in strength) and weak acids (defined as nitric acid less than 67% in strength). These conversion factors shall be used by the CEMS to calculate the NOx emission rate expressed as lbs/ton and demonstrate compliance with the emission limits in b)2.

(Authority for term: OAC rules 3745-31-05(F) and 3745-77-07(C)(1), 40 CFR Part 60.72(a)(1)&(2), and Consent Decree, DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio)

g) Miscellaneous Requirements

(1) The terms and conditions of Permit Number P0103851 include changes made to the Nitric Acid Plant economizer and exhaust stack.

(2) The permittee shall neither generate nor use any NOx emission reductions resulting from any projects conducted pursuant to the Consent Decree (DOJ Case No. 90-5-2-1-08469, Civil Action Number 1:07CV089, US District Court, Southern District of Ohio) for the purpose of obtaining netting credits or offsets in any PSD, major nonattainment and/or minor NSR permit or permit proceeding.

6. P002, Ammonium Nitrate Plant

Operations, Property and/or Equipment Description:

Ammonium nitrate plant with packed bed scrubber

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)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.
b.	OAC rule 3745-17-11(B)	Particulate emissions (PE) shall not exceed 8.76 lbs/hr (based on Figure II of OAC rule 3745-17-11).

(2) Additional Terms and Conditions

a. All emissions from this emissions unit shall be vented to a packed bed scrubber.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall be between 0.5 to 1.5 inches of water.

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

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 200 gallons per minute.

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

(3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pH of the scrubber liquid, that shall be maintained in order to demonstrate compliance, is between 0.1 and 5.

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

(4) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate on a once per shift basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, 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;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, 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:

f. a description of the corrective action;

g. the date the corrective action was completed;

h. the date and time the deviation ended;

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

j. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and

k. the name(s) 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable PE emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit 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))

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports for the following information:

a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber as required in b)(2)a;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop, liquid flow rate, and/or scrubber liquid pH into compliance with the acceptable range, was determined to be necessary and was not taken;

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit; and.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))

f) Testing Requirements

(1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

8.76 lbs/hr of PE.

Applicable Compliance Method:

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

The emission testing shall be conducted within 6-months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with allowable mass emission rate for PE.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for PE, Methods 1-5 of 40 CFR Part 60, Appendix A.

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

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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).

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

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

b. Emission Limitation:

Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.

7. T001, Acid Tank 6

Operations, Property and/or Equipment Description:

27,000 gallon fixed roof storage tank with packed bed scrubber

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) (14-04064)	Particulate emissions (Nitric Acid Vapor) shall not exceed 0.9 TPY. See b)(2)a.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.
c.	OAC rule 3745-17-11(B)	21.7 lbs of PE/hr (based on Table I of OAC 3745-17-11, the maximum throughput of the tank was assumed to be that of the maximum production of the Nitric Acid Plant, 12 tons per hour). The hourly PE emission limitation is greater than the emissions unit's maximum uncontrolled emission rate. Therefore, no additional monitoring, record keeping, reporting, or test requirements are necessary to demonstrate compliance with this emission limitation.

(2) Additional Terms and Conditions

a. The Nitric Acid emissions from this emission unit shall be vented to a packed bed scrubber having a minimum control efficiency of 75%.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall be between 0.5 to 1.5 inches of water.

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

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 200 gallons per minute.

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

(3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pH of the scrubber liquid, that shall be maintained in order to demonstrate compliance, is between 0.1 and 5.

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

(4) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate on a once per shift basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, 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;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this

permit, 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:

f. a description of the corrective action;

g. the date the corrective action was completed;

h. the date and time the deviation ended;

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

j. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and

k. the name(s) 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable PE emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit 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) 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 14-04064: d)(1)-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.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports for the following information:

a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber as required in b)(2)a;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop, liquid flow rate, and/or scrubber liquid pH into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

(2) 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 14-04064: e)(1)). 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.

f) Testing Requirements

(1) Compliance with the emission limitation(s) in a) and b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.9 TPY of PE (nitric acid vapor).

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance may be demonstrated by the equations found in AP 42 Chapter 7.0 Liquid Storage Tanks and the storage tank information and the operational parameters submitted in PTI application 14-04064.

b. Emission Limitation:

21.7 lbs of PE/hr emitted Nitric Acid Vapor.

Applicable Compliance Method:

This emission limitation is greater than the emission unit’s potential to emit. Compliance may be demonstrated by the equations found in AP 42 Chapter 7.0 Liquid Storage Tanks and the storage tank information and the operational parameters submitted in PTI application 14-04064.

c. Emission Limitation:

Visible particulate emissions (PE) from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1))

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-04064: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

8. T025, Ammonia Storage Tank

Operations, Property and/or Equipment Description:

7,100,000 gallon refrigerated pressurized storage tank with 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.	None	None

(2) Additional Terms and Conditions

a. None.

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.