John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

2/27/2013

Certified Mail

Facility ID: 0302020370
Permit Number: P0110311
County: Allen

Michael Resar
PCS Nitrogen Ohio, L.P.
1900 Fort Amanda Road
Lima, OH 45804

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Minor Permit Modification

Dear Permit Holder:

Enclosed is a finalOhio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to “Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General□□s Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office as indicated on page one of your permit.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Northwest District Office

FINAL

Division of Air Pollution Control
Title V Permit
for
PCS Nitrogen Ohio, L.P.

Facility ID:	0302020370
Permit Number:	P0110311
Permit Type:	Minor Permit Modification
Issued:	2/27/2013
Effective:	2/27/2013
Expiration:	12/14/2014

Division of Air Pollution Control
Title V Permit
for
PCS Nitrogen Ohio, L.P.

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Scheduled Maintenance 6
4. Risk Management Plans 6
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 8
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting 15
28. Permit Transfers 15

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15

B. Facility-Wide Terms and Conditions 16

C. Emissions Unit Terms and Conditions 23

1. B501, Ammonia Production Unit: Boiler #1 24
2. B502, Ammonia Production Unit: Boiler #2 27
3. B503, Ammonia Production Unit: Primary Reformer and Ancillary 30
4. B504, Ammonia Unit Converter Startup Heater 36
5. B506, Ammonia Production Unit Gas Turbine 38
6. B507, Ammonia Load Heater 40
7. P520, Ammonia Production Unit Reforming Section 44
8. P523, Ammonia Production Unit CO2 Stripper Section 48
9. P524, Urea Prilling Dryer Cyclone 49
10. P528, Urea Crystallizer Section 61
11. P529, Urea Plant Concentrator Section 67
12. P531, Ammonium Nitrate Neutralizer System 73
13. P536, West Urea Warehouse Operations 79
14. P546, Granulation Plant Duct Scrubber 83
15. P547, Granulator Plant Evaporator 97
16. P560, Urea Plant Prill Tower 106
17. P570, #2 Nitric Acid Plant 113
18. P571, #1 Cooling Tower 126
19. P572, #2 Cooling Tower 128
20. P577, #4 Cooling Tower 130
21. T560, Urea Formadehyde Storage Tank (UF-85) 134

Authorization

Facility ID:	0302020370
Facility Description:	Nitrogenous Fertilizers
Application Number(s):	A0044026
Permit Number:	P0110311
Permit Description:	Title V Minor Permit Modification for Nitrogenous Fertilizers facility for changes to emissions unit P577 - #4 Cooling Tower to include terms and conditions from Permit No. P0110310, issued 8/8/2012; and emissions unit J001 - to include as an insignificant emissions unit in the Facility-wide terms and conditions.
Permit Type:	Minor Permit Modification
Issue Date:	2/27/2013
Effective Date:	2/27/2013
Expiration Date:	12/14/2014
Superseded Permit Number:	P0108791

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

PCS Nitrogen Ohio, L.P.
Fort Amanda & Adgate Roads
None
Lima, OH 45804

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

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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

Scott J. Nally
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) 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 Ohio EPA DAPC, Northwest District Office.

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

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

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

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

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

11. Reopening for Cause

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

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

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

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

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

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

12. Federal and State Enforceability

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

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

13. Compliance Requirements

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

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

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

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the 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) 6.

2. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart VV, New Source Performance Standards, Leak Detection and Repair Requirements: P525, P526, P527, P546, P547, P563 and T560. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart VV. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 60, Subpart VV, and Subpart A.

   [40 CFR, Part 60, Subpart VV]

3. The following emissions units contained in this permit are subject to OAC rule 3745-21-09(DD), Leaks from process units that produce organic chemicals: P525, P526, P527, P528, P529, P546, P547, P560, P563 and T560. The complete requirements, may be accessed via the internet from Ohio EPA's website http://www.epa/state.oh.us or by contacting the appropriate Ohio EPA District office or local air agency.

   [OAC rule 3745-21-09(DD)]

4. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing: P524, P525, P526, P527, P528, P529, P546, P547, P557, P563, P564 and T560. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

   The permittee shall comply with all applicable requirements of 40 CFR, Part 63, Subpart FFFF. The permittee shall also comply with all applicable requirements of 40 CFR, Part 63, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR, Part 63, Subpart FFFF, and Subpart A.

   [40 CFR, Part 63, Subpart FFFF]

5. Pursuant to 40 CFR, Part 64, the permittee has submitted, and the Ohio EPA has approved a compliance assurance monitoring plan for emissions units P524, P531, P536, P546, P560 and P577 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

   [40 CFR, Part 64]

6. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are

subject to one or more applicable requirements contained in a permit to install or in the SIP-approved versions of OAC Chapters 3745-21 and 3745-31:

a) B508 – indirect fired natural gas fired heater, blending and shipping section (P.R. 76-4098);

b) J001 - diesel exhaust fluid (DEF) urea water solution truck/railcar loading (PTI #P0109600);

c) P525 – urea prilling mother liquor system;

d) P526 – urea plant synthesis section (PTI #03-968);

e) P527 – urea dissolving tank;

f) P557 – urea water solution loading systems;

g) P563 – urea reactor feed section (PTI #03-968);

h) P564 – urea plant UTI hot well section (PTI #03-968); and

i) P575 – diesel fire water pump – 325 horsepower

[OAC rule 3745-77-07(A)(13)]

7. The following insignificant emissions units are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the ”de minimis” criteria established in OAC rule 3745-15-05:

a) P521 – ammonia production unit purification section;

b) P522 – ammonia unit synthesis section;

c) P532 – nitric acid storage tanks (T-31, T-32 and T-33);

d) P533 – chemical sewer collection sump;

e) P544 – gas odorization station;

f) P545 – east urea warehouse;

g) P554 – ammonia truck loading;

h) P555 – ammonia rail car loading;

i) P556 – ammonia aqua rail/truck loading;

j) P558 – ammonium nitrate solution truck and rail loading;

k) P559 – fertilizer solutions rail/truck loading;

l) P573 - #3 cooling tower, nitric acid unit;

m) P574 – nitric acid solution loading in blending, shipping and storage area;

n) T517 – ammonium nitrate surge tank - 8,200 gallons capacity (P.R. 7);

o) T518 – ammonia storage tanks – 30,000 tons capacity (each) (T-5 and T-6);

p) T537 – ammonia and/or 2800 solution spheres – 864,300 gallons capacity (each) (S-1, S-2, S-3 and S-4);

q) T539 – corrosion inhibitor storage tank – 11,917 gallons capacity (T-19);

r) T540 – slop solution recovery tank – 20,580 gallons capacity (T-61);

s) T543 – slop solution storage tank and collection sump – 20,160 gallons capacity (T-60);

t) T544 – weak nitrate surge tank – 20,580 gallons capacity (T-8);

u) T546 – urea water or ammonium nitrate storage tank – 63,700 gallons capacity (T-10);

v) T547 – urea water solution storage tank – 30,033 gallons capacity (T-55);

w) T548 – 2800 urea/ammonium nitrate solution storage tank – 2,646,200 gallons capacity (T-23);

x) T549 – 2800 solution storage tanks – 37,230 gallons capacity (each)(D-11);

y) T550 – 2800 urea/ammonium nitrate solution storage tank – 2,174,800 gallons capacity (T-20);

z) T551 – anhydrous ammonia storage drums – 49,932 gallons capacity (each) (D-4 and D-5);

aa) T553 – aqua ammonia storage tank – 15,276 gallons capacity (T-26);

bb) T554 – ammonium nitrate or aqua ammonia loading drum – 30,610 gallons capacity (T-7);

cc) T556 – aqua ammonia storage tank – 35,858 gallons capacity (T-41);

dd) T557 – ammonium nitrate blend and storage tanks – 20,580 gallons capacity (each) (T-8);

ee) T558 – urea water storage tank – 17,000 gallons capacity (T-51);

ff) T559 – urea solutions or ammonium nitrate solutions storage tank – 636,000 gallons capacity (T-21);

gg) T561 – aqua ammonia storage tank – 15,276 gallons capacity (T-27);

hh) T562 – aqua ammonia storage tank – 15,276 gallons capacity (T-28);

ii) T563 – aqua ammonia storage tank – 15,276 gallons capacity (T-29);

jj) T564 – urea solutions or ammonium nitrate solutions storage tank – 1,501,000 gallons capacity (T-22);

kk) T575 – nitric acid blend tank – 34,958 gallons capacity (T-35);

ll) T576 – nitric acid blend tank – 1,000 gallons capacity (T-7);

mm) T605 – nitric acid 68% storage tank – 30,000 gallons capacity (T-12);

nn) T606 – nitric acid 68% storage tank – 30,000 gallons capacity (T-13);

oo) T610 - nitric acid 68% storage tank – 25,000 gallons capacity (T-36);

pp) T613 – ammonium nitrate blend and storage tanks – 35,858 gallons capacity (each) [T-9 (P.R. 76-5061)];

qq) T614 – nitric acid 60% storage tank – 10,400 gallons capacity (T-30);

rr) T615 – weak nitrate surge tank – 2,000 gallons capacity [T-9 (P.R. 4041)];

ss) T616 – urea water storage tank – 17,000 gallons capacity (T-52);

tt) T617 – urea water storage tank – 17,000 gallons capacity (T-53);

uu) T618 – urea water storage tank – 17,000 gallons capacity (T-54);

vv) T619 – Benfield storage tank – 168,000 gallons capacity (P.R. 76-4300);

ww) T620 – 2800 solution storage tanks – 37,230 gallons capacity (each) (D-12); and

xx) T621 – 2800 solution storage tanks – 37,230 gallons capacity (each) (D-13)

8. The permittee shall comply with the applicable requirements under 40 CFR, Part 63, Subpart FFFF, including the following sections, for the following insignificant emission units:P525, P526, P527, P557, P563 and P564. Each of these emissions units is an existing affected source per 40 CFR, 63.2440.

63.2445(b) through 63.2445(d)	When do I have to comply with this subpart?
63.2450	Emission Limitations, Work Practice Standards and Compliance Requirements -- What are my general requirements for complying with this subpart?
63.2450(a)	You must be in compliance with the emission limits and work practice standards in tables 1 through 7* to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 63.2455 through 63.2490 (or the alternative means of compliance in 63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in 63.2515, 63.2520, and 63.2525. * only the work practice standards listed in Table 6 are applicable
63.2450(m)	Reporting
63.2450(p)	Opening a safety device, as defined in 63.2550, is allowed at any time conditions require it to avoid unsafe conditions
63.2455	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for continuous process vents?
63.2455(a)	You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement

	specified in paragraphs (b) through (c) of this section. [Note: There are no emission limits and/or work practice standards in Table 1 that are applicable.]
63.2455(b)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.
63.2480	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for equipment leaks?
63.2480(a)	You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section. [See Table 6 below for requirements.]
63.2480(b)	If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
63.2515	Notifications, Reports and Records – What notifications must I submit and when?
63.2515(a)	You must submit all of the notifications in 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
63.2515(b)	Initial notification* * the company submitted the initial notification in 2004
63.2520	Notifications, Reports and Records – What reports must I submit and when?
63.2520(a)	You must submit each report in Table 11 to this subpart that applies to you.
63.2520(b)	Unless the Administrator has approved a different schedule for submission of reports under 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.
63.2520(d)	Notification of compliance status report
63.2520(e)	Compliance report
63.2525	Notifications, Reports and Records – What records must I keep?
63.2525(a)	Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
63.2525(b)	Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.
63.2525(f)	A record of each time a safety device is opened to avoid unsafe conditions in accordance with 63.2450(s).
63.2525(j)	In the SSMP required by 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.
63.2535	Other Requirements and Information – What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2535(k)	Compliance with 40 CFR, part 60, subpart VV and 40 CFR, part 61, subpart V
63.2540	Other Requirements and Information – What parts of the General Provisions

	apply to me?
Table 6	Requirements for Equipment Leaks
Table 11	Requirements for Reports
Table 12	Applicability of General Provisions to Subpart FFFF

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

C. Emissions Unit Terms and Conditions

1. B501, Ammonia Production Unit: Boiler #1

Operations, Property and/or Equipment Description:

ammonia production unit - 227 mmBtu/hr natural gas fired boiler (boiler #1)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input
c.	OAC rule 3745-18-06(E)	See b)(2)a.
d.	OAC rule 3745-18-08(D)(1)	1.27 lbs sulfur dioxide (SO2)/mmBtu of actual heat input

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) in accordance with OAC rule 3745-18-06(C).

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

[OAC rule 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 was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the boiler (mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

1.27 lbs SO2/mmBtu of actual heat input

Applicable Compliance Method:

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, compliance with the limitation above shall be determined in accordance with Methods 1 – 4 and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

2. B502, Ammonia Production Unit: Boiler #2

Operations, Property and/or Equipment Description:

ammonia production unit - 227 mmBtu/hr natural gas fired boiler (boiler #2)

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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input
c.	OAC rule 3745-18-06(E)	See b)(2)a.
d.	OAC rule 3745-18-08(D)(1)	1.27 lbs sulfur dioxide (SO2)/mmBtu of actual heat input

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) in accordance with OAC rule 3745-18-06(C).

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

[OAC rule 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 was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the boiler (mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

1.27 lbs SO2/mmBtu of actual heat input

Applicable Compliance Method:

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, compliance with the limitation above shall be determined in accordance with Methods 1 – 4 and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

3. B503, Ammonia Production Unit: Primary Reformer and Ancillary

Operations, Property and/or Equipment Description:

Ammonia Production Unit – 1,300 mmBtu/hr Natural Gas - and/or Clean Process Waste Gas-Fired Reformer

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC rule 3704.03(T) [PTI No. P0108792, issued 11/18/11]	0.324 lb of nitrogen oxides (NOx)/mmBTU; 0.0102 lb of organic compounds (OC)/mmBTU; 0.0065 lb of volatile organic compounds (VOC)/mmBTU; 0.0052 lb of carbon monoxide (CO)/mmBTU; 0.0022 lb of particulate matter 10 microns or less in size (PM_{10})/mmBTU (filterable) See b)(2)a.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average, except as provided by rule
c.	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBTU of actual heat input [See b)(2)c.]
d.	OAC rule 3745-18-08(D)(2)	1.27 lbs of sulfur dioxide (SO2)/mmBTU of actual heat input [See b)(2)b.]

(2) Additional Terms and Conditions

a. The mass emission rate limitations in b)(1)a. above represent the potential to emit (PTE), defined as the maximum capacity to emit an air pollutant under the physical and operational design. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(1)d., e, f., g., and h. for details regarding the PTE.

b. The permittee burns only natural gas and/or clean process waste gas in this emissions unit which results in a negligible potential to emit for SO2. Therefore, no monitoring, record keeping or reporting is necessary to show compliance with the SO2 limitation.

c. The emission limitation established by this rule is less stringent than the PM_{10} emission limitation established pursuant to ORC 3704.03(T). All emissions of particulate matter from this emission unit are PM_{10}.

d. Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size ($PM_{2.5}$) are being implemented through the PM_{10} Surrogate Policy issued by EPA in 1997. For purposes of demonstrating that PM_{10} is a reasonable surrogate for $PM_{2.5}$, all emissions of PM_{10} will be considered $PM_{2.5}$.

c) Operational Restrictions

(1) The permittee shall burn only natural gas and/or clean process waste gas as fuel in this emissions unit.

[OAC rule 3745-77-07(A)(1) and P0108792]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas and/or clean process waste gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1) and P0108972]

(2) The permittee shall maintain the following records for emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551, as described in Permit to Install application No. P0105861 submitted on December 22, 2009 in order to demonstrate that the ammonia and urea units modification project does not trigger a major modification for PE, PM_{10}/ $PM_{2.5}$, SO2, NOx, CO, and VOC:

a. the projected actual annual emissions for PE, PM_{10}/ $PM_{2.5}$, SO2, NOx, CO, and VOC, in tons per year, from the ammonia and urea units modification project as submitted in the application for PTI No. P0105861 on December 22, 2009; and

b. the total actual annual emissions for PE, PM_{10}/ $PM_{2.5}$, SO2, NOx, CO, and VOC, in tons per year, from emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551 combined for five calendar years after commencing operation of the ammonia and urea units modification project.

[OAC rule 3745-77-07(C)(1) and P0108972]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and P0108972]

(2) The permittee shall notify the Northwest District Office in writing if annual emissions from all emissions units in the ammonia and urea modification, as specified in d)(2)b., result in a significant PE, PM_{10}/$PM_{2.5}$, SO2, NOx, CO, and/or VOC emissions increase and exceed the projected actual PE, PM_{10}/$PM_{2.5}$, SO2, NOx, CO, and VOC emissions contained in the application for PTI No. P0105861, submitted December 22, 2009. This notification shall identify the cause for the significant emissions increase and the estimated PE, PM_{10}/$PM_{2.5}$, SO2, NOx, CO, and/or VOC emissions. This notification shall be submitted to the Northwest District Office within 120 days after the end of such year.

[OAC rule 3745-77-07(C)(1) and P0108972]

f) Testing Requirements

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

a. Emission Limitation:

Visible PE shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and P0108972]

b. Emission Limitation:

0.020 lb of PE/mmBTU of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the maximum hourly gas consumption rate (1.528 $mmft^3$/hr) by the emission factor from AP-42, Table 1.4-2 (7/98) of 1.90 lbs of PE (filterable portion only)/$mmft^3$, and then dividing by the maximum heat input capacity of the reformer (1,300 mmBTU/hr).

If required, compliance with the lb/mmBTU limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and P0108972]

c. Emission Limitation:

1.27 lbs of SO2/mmBTU of actual heat input

Applicable Compliance Method:

When firing natural gas and/or clean process waste gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, compliance with the limitation above shall be determined in accordance with Methods 1 – 4 and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and P0108972]

d. Emission Limitation:

0.324 lb of NOx/mmBTU

Applicable Compliance Method:

The emission limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design). The PTE is based on a stack test conducted on 12/09/00.

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and P0108972]

e. Emission Limitation:

0.0102 lb of OC/mmBTU

Applicable Compliance Method:

The emission limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design). The PTE is

based on a heat content of 851 Btu/scf and an OC emission factor of 8.70 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 - 4 and 18, 25, or 25A, as applicable, of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and P0108972]

f. Emission Limitation:

0.0065 lb of VOC/hour

Applicable Compliance Method:

The emission limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design). The PTE is based on a heat content of 851 Btu/scf and a VOC emission factor of 5.50 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 - 4 and 18, 25, or 25A, as applicable, of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and P0108972]

g. Emission Limitation:

0.0052 lb of CO/mmBTU

Applicable Compliance Method:

The emission limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design). The PTE is based on a worst case stack test conducted on 02/14/01.

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and P0108972]

h. Emission Limitation:

0.0022 lb of PM_{10}/mmBTU (filterable)

Applicable Compliance Method:

The hourly limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design). The PTE is based on a heat content of 851 Btu/scf and a PM_{10} emission factor of 1.9 lbs/mmft^3 (filterable portion only, AP-42 Table 1.4-2 [7/98]).

If required, compliance with the allowable emission limitation (filterable portion only) shall be determined in accordance with Methods 1-4, and 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, Northwest District Office (NWDO).

If testing is determined to be necessary for condensable particulate emissions, Method 202 of 40 CFR, Part 51, Appendix M shall be used for informational purposes only, and would not be required for compliance testing purposes.

[OAC rule 3745-77-07(C)(1) and P0108972]

g) Miscellaneous Requirements

(1) None.

4. B504, Ammonia Unit Converter Startup Heater

Operations, Property and/or Equipment Description:

ammonia unit – 37 mmBtu/hr natural gas fired converter start up heater

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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input
c.	OAC rule 3745-18-06(E)	See b)(2)a.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) in accordance with OAC rule 3745-18-06(C).

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

[OAC rule 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 was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the heater (mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

5. B506, Ammonia Production Unit Gas Turbine

Operations, Property and/or Equipment Description:

ammonia production unit –235 mmBtu/hr natural gas fired turbine

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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(4)	0.040 lb PE/mmBtu of actual heat input
c.	OAC rule 3745-18-06(E)	See b)(2)a.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) in accordance with OAC rule 3745-18-06(C).

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

[OAC rule 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 was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation: 0.040 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the turbine (mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

6. B507, Ammonia Load Heater

Operations, Property and/or Equipment Description:

40 mmBtu/hr natural gas fired ammonia load heater

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.	ORC 3704.03(T) [PTI No. P0105861, issued 5/21/10]	0.082 lb of carbon monoxide (CO)/mmBtu 0.059 lb of nitrogen oxides (NOx)/mmBtu
b.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input
d.	OAC rule 3745-18-06(E)	See b)(2)b.

(2) Additional Terms and Conditions

a. The mass emission rate limitations in b)(1)a. above represent the potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(1)c. and d.for details regarding the potential to emit (PTE).

Emissions from the ammonia load heater are associated with the combustion of natural gas and include emissions of particulate matter 10 microns or less in size (PM10), organic compounds (OC), volatile organic compounds (VOC), and sulfur dioxide (SO2). The uncontrolled potential emissions of PM10, OC, VOC, and SO2 are of negligible quantities for criteria pollutants and therefore have not been addressed within this permit.

b. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) in accordance with OAC rule 3745-18-06(C).

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1)and PTI No. P0105861]

d) Monitoring and/or Recordkeeping Requirements

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

[OAC rule 3745-77-07(C)(1)and PTI No. P0105861]

(2) The permittee shall maintain the following records for emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551, as described in Permit to Install application number P0105861 submitted on December 22, 2009 in order to demonstrate that the ammonia and urea units modification project does not trigger a major modification for PE, PM10/PM2.5, SO2, NOx, CO, and VOC:

a. the projected actual annual emissions for PE, PM10/PM2.5, SO2, NOx, CO, and VOC, in tons per year, from the ammonia and urea units modification project as submitted in the application for PTI P0105861 on December 22, 2009; and

b. the total actual annual emissions for PE, PM10/PM2.5, SO2, NOx, CO, and VOC, in tons per year, from emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551 combined for five calendar years after commencing operation of the ammonia and urea units modification project.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1)and PTI No. P0105861]

(2) The permittee shall notify the Northwest District Office in writing if annual emissions from all emissions units in the ammonia and urea modification, as specified in d)(2)b., result in a significant PE, PM10/PM2.5, SO2, NOx, CO, and/or VOC emissions increase and exceed the projected actual PE, PM10/PM2.5, SO2, NOx, CO, and VOC emissions contained in the application for P0105861, submitted December 22, 2009. This notification shall identify the cause for the significant emissions increase and the estimated PE, PM10/PM2.5, SO2, NOx, CO, and/or VOC emissions. This notification shall be submitted to the Northwest District Office within 120 days after the end of such year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)and PTI No. P0105861]

b. Emission Limitation:

0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the maximum hourly natural gas consumption rate (0.0392 mm cu. ft/hr) by an AP-42 emission factor of 1.9 lbs PE (filterable)/mm cu. Ft (AP-42, Table 1.4-2 [7/98]), then dividing by the maximum heat input capacity of the heater (40 mmBtu/hr).

If required, compliance with the lb/mmBtu PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1)and PTI No. P0105861]

c. Emission Limitation:

0.059 lb of NOx/mmBtu

Applicable Compliance Method:

The limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design). The PTE is based on a heat content of 1,020 Btu/scf and a NOx emission factor of 60 lbs/mm cu. ft (supplied by the manufacturer).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

d. Emission Limitation:

0.082 lb of CO/mmBtu

Applicable Compliance Method:

The emission limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design). The PTE is based on a heat content of 1,020 Btu/scf and a CO emission factor of 84 lbs/mm cu. ft (AP-42, Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

g) Miscellaneous Requirements

(1) The permittee's proposed project involves the modification of five emissions units (B503, B507, P520, P521, and P524) to allow for increased ammonia and urea production capability. Several additional emissions units (B506, B508, P522, P523, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551) will experience increased actual material throughput and increased actual emissions due to the increase in ammonia and urea production. All of these emissions units are subject to New Source Review requirements specified in OAC rule 3745-31-10 to determine if a major modification will occur at the facility. Based on the information supplied in the application for PTI P0105861, submitted December 22, 2009, this project does not result in a significant increase and significant net emissions increase of a regulated NSR pollutant. Therefore, this project is not a major modification as defined in OAC rule 3745-31-01. This determination is subject to the recordkeeping and reporting requirements specified in d)(2) and e)(2) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

7. P520, Ammonia Production Unit Reforming Section

Operations, Property and/or Equipment Description:

ammonia production unit – reforming section

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) b)(2)b.

(2) 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), as effective 11/30/01 [PTI No. P0105861, issued 5/21/10]	8.76 tons of fugitive volatile organic compounds (VOC)/yr; 1.16 lbs of carbon monoxide (CO)/hr; 5.08 tons of CO/yr See b)(2)b.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)c.

(2) Additional Terms and Conditions

a. The mass emission rate limitations in b)(1)a. above represents the potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(1)a. and b.for details regarding the potential to emit (PTE).

b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B 265 changes), such that BAT is no longer required by state regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the

revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/controls measures no longer apply.

c. OAC rule 3745-31-05(A)(3)(a)(ii) applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of VOC and CO from this air contaminant source since the uncontrolled potential to emit for VOC, and CO are each less than 10 tons per year.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following records for emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551, as described in Permit to Install application number P0105861 submitted on December 22, 2009 in order to demonstrate that the ammonia and urea units modification project does not trigger a major modification for PE, PM10/PM2.5, SO2, NOx, CO, and VOC:

a. the projected actual annual emissions for PE, PM10/PM2.5, SO2, NOx, CO, and VOC, in tons per year, from the ammonia and urea units modification project as submitted in the application for PTI P0105861 on December 22, 2009; and

b. the total actual annual emissions for PE, PM10/PM2.5, SO2, NOx, CO, and VOC, in tons per year, from emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551 combined for five calendar years after commencing operation of the ammonia and urea units modification project.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

e) Reporting Requirements

(1) The permittee shall notify the Northwest District Office in writing if annual emissions from all emissions units in the ammonia and urea modification, as specified in d)(1)b., result in a significant PE, PM10/PM2.5, SO2, NOx, CO, and/or VOC emissions increase and exceed the projected actual PE, PM10/PM2.5, SO2, NOx, CO, and VOC emissions contained in the application for P0105861, submitted December 22, 2009. This notification shall identify the cause for the significant emissions increase and the estimated PE, PM10/PM2.5, SO2, NOx, CO, and/or VOC emissions. This notification shall be submitted to the Northwest District Office within 120 days after the end of such year.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

8.76 tons of fugitive VOC/yr

Applicable Compliance Method:

The emission limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for this emissions unit. The PTE is based on an emission factor of 2.00 lbs of fugitive* VOC/hour multiplied by a maximum operating schedule of 8,760 hours per year and dividing by 2,000 lbs.

* The emission factor is derived from two Synthetic Organic Chemical Manufacturing Industry (SOCMI) reference documents: Protocol for Equipment Leak Emission Estimates; U.S. EPA, OAQPS; EPA-453/R-95-017; November 1995; and Preferred and Alternative Methods for Estimating Fugitive Emissions from Equipment Leaks; Eastern Research Group, EIIP; Volume II, Chapter 4; November 1996.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

b. Emission Limitation:

1.16 lbs of CO/hr; 5.08 tons of CO/yr

Applicable Compliance Method:

The hourly emission limitation represents the PTE (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for this emissions unit. The PTE is based on previous stack testing. The annual limitation was developed by multiplying the hourly emission rate by 8,760 hours per year and dividing by 2,000 lbs. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, it shall be a rebuttable presumption that compliance with the annual emission limitation has been attained.

If required, the permittee shall demonstrate compliance with the hourly limitation pursuant to Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

g) Miscellaneous Requirements

(1) The permittee's proposed project involves the modification of five emissions units (B503, B507, P520, P521, and P524) to allow for increased ammonia and urea production capability. Several additional emissions units (B506, B508, P522, P523, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551) will experience increased actual material throughput and increased actual emissions due to the increase in ammonia and urea production. All of these emissions units are subject to New Source Review requirements specified in OAC rule 3745-31-10 to determine if a major modification will occur at the facility. Based on the information supplied in the application for PTI P0105861, submitted December 22, 2009, this project does not result in a significant increase and significant net emissions increase of a regulated NSR pollutant. Therefore, this project is not a major modification as defined in OAC rule 3745-31-01. This determination is subject to the recordkeeping and reporting requirements specified in d)(1) and e)(1) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI No. P0105861]

8. P523, Ammonia Production Unit CO2 Stripper Section

Operations, Property and/or Equipment Description:

ammonia production unit CO2 stripper section

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. This emission unit's potential to emit for organic compounds is greater than 5 tons per year, and, therefore, is considered a significant emissions unit. However, there are no applicable regulations for this emissions unit.

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.

9. P524, Urea Prilling Dryer Cyclone

Operations, Property and/or Equipment Description:

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) [PTI No. P0108792, issued 11/18/11]	3.34 lbs of particulate emissions (PE)/hr; 14.62 tons of PE/yr (filterable) 2.00 lbs of particulate matter 10 microns or less in size (PM_{10})/hr; 8.77 tons of PM_{10}/yr (filterable) 1.43 lbs of particulate matter 2.5 microns or less in size ($PM_{2.5}$)/hr; 6.28 tons of $PM_{2.5}$/yr (filterable) Visible PE shall not exceed 10% opacity as a six-minute average. See b)(2)a. and c)(1)
b.	ORC 3704.03(T) [PTI No. P0108792, issued 11/18/11]	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-17-07(A)	See b)(2)d.
d.	OAC rule 3745-17-11(B)(1)	See b)(2)e.
e.	40 CFR, Part 63, Subpart FFFF [40 CFR 63.2430 – 63.2550] In accordance with 40 CFR 63.2440, this emissions unit is an existing affected source consisting of crystal drying, conveying, melting and associated equipment which is part of a miscellaneous organic chemical manufacturing process unit at an	See b)(2)f., d)(7), and e)(4)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	existing chemical manufacturing facility subject to the emission limitations/control measures specified in this section.	
f.	40 CFR 63.1-15 [40 CFR 63.2540]	Table 12 to 40 CFR, Part 63, Subpart FFFF – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 apply.
g.	40 CFR, Part 64- Compliance Assurance Monitoring (CAM)	See c)(1), d)(1) through d)(6) and e)(1) through e)(3)

(2) Additional Terms and Conditions

a. PTI No. P0108791 established the federally enforceable emission limitations in b)(1)a. above for purposes of limiting potential to emit (PTE) for emissions of particulate matter from this emissions unit. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) which requires control equipment.

b. The BAT requirements under ORC 3704.03(T) have been determined to be the compliance with the operational restrictions contained in c)(1).

c. Once the U.S. EPA approves the December 1, 2006 version of 3745-31-05, BAT requirements will not be applicable to the particulate emissions emitted from this emissions unit. BAT (under Senate Bill 265 changes) is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

d. The visible emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).

e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).

f. The permittee shall comply with the additional terms and conditions under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2445(b) through (d)	When do I have to comply with this subpart?
63.2450	Emission Limitations, Work Practice Standards and Compliance Requirements -- What are my general

	requirements for complying with this subpart?
63.2450(a)	You must be in compliance with the emission limits and work practice standards in tables 1 through 7* to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 63.2455 through 63.2490 (or the alternative means of compliance in 63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in 63.2515, 63.2520, and 63.2525. * Only the work practice standards listed in Table 6 are applicable
63.2450(p)	Opening a safety device, as defined in 63.2550, is allowed at any time conditions require it to avoid unsafe conditions
63.2455	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for continuous process vents?
63.2455(a)	You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section. [Note: There are no emission limits and/or work practice standards in Table 1 that are applicable.]
63.2455(b)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.

63.2480	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for equipment leaks?
63.2480(a)	You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section. [See Table 6 below for requirements.]
63.2480(b)	If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
63.2535	Other Requirements and Information – What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2535(k)	Compliance with 40 CFR, Part 60, subpart VV and 40 CFR, Part 61, subpart V
63.2540	Other Requirements and Information – What parts of the General Provisions apply to me?
Table 6	Requirements for Equipment Leaks

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for purposes of establishing federally enforceable requirements which limit the PTE [see b)(2)a.]. All exhaust gas from the urea prilling dryer cyclone shall be controlled by a scrubber. The scrubber control system shall meet the following requirements:

a. a maximum outlet concentration of 0.016 grains per dry standard cubic foot (gr/dscf) of exhaust gas for PE (filterable);

b. a maximum outlet concentration of 0.010 gr/dscf of exhaust gas for PM_{10} (filterable); and

c. a maximum outlet concentration of 0.007 gr/dscf of exhaust gas for $PM_{2.5}$ (filterable).

d. The scrubber shall maintain the blower amps at a value less than or equal to 43.91 amps, as a daily average, at all times while the emissions unit is in

operation. This operational restriction was established through a series of diagnostic and compliance stack tests in 2004, and was approved in a letter to the permittee dated August 19, 2005.

e. The scrubber shall maintain a liquid flow rate of a value greater than or equal to 4.93 gallons per minute, as a daily average, at all times while the emissions unit is in operation. This operational restriction was established through a series of diagnostic and compliance stack tests in 2004, and was approved in a letter to the permittee dated August 19, 2005.

f. The permittee may petition to the Ohio EPA for reestablishment, based on emissions testing or the collection of data, of the scrubber blower amps and water flow rate values provided the permittee can demonstrate to the Ohio EPA's satisfaction that the new values will reasonably ensure compliance and the basis upon which the values were previously established is no longer applicable.

The operation of the control equipment outside the values established in c)(1)d. and c)(1)e. above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Northwest District Office, compliance with the mass emission limitations and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emission readings, using U.S. EPA approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the values that will be established above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations. In addition, the permittee may provide other relevant credible evidence to the Ohio EPA to demonstrate that a deviation of an operational restriction is not a violation of the applicable mass emission and/or visible emission limitations.

[OAC rule 3745-77-07(A)(1), P0108792 and 40 CFR, Part 64]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain equipment to monitor the scrubber blower amps and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each shift:

a. the scrubber blower amps;

b. the scrubber water flow rate, in gallons per minute; and

c. a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

Whenever the monitored values for the scrubber blower amps and/or scrubber water flow rate deviate from the range specified in section c)(1)d. and/or c)(1)e., the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit. In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified in section c)(1)d. and/or c)(1)e. unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the scrubber blower amps and/or scrubber water flow rate immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(C)(1), P0108972 and 40 CFR, Part 64]

(2) Scrubber operating parameters shall be re-verified as a result of any changes to the operating conditions of the scrubber or emissions unit. In addition to periodic monitoring of their scrubber operating parameters, the permittee also has an inspection and maintenance program for the scrubber. Based on the results of the monitoring and inspection program, repairs to the scrubber shall be made as needed. If the current indicators and/or the scrubber inspection program is considered inadequate, the permittee will develop a Quality Improvement Plan.

At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1), P0108972 and 40 CFR, Part 64]

(3) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1), P0108972 and 40 CFR, Part 64]

(4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the scrubber controlling this emissions unit are the scrubber blower amps and the scrubber water flow rate which were established in accordance with the manufacturer's recommendations and verified during site-specific particulate emission testing and scrubber parametric data collected during the emission testing. When the blower amps and/or the water flow rate of the scrubber are operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in Section e) below.

The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The scrubber shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) In addition to the parametric monitoring required in Section d)(1), the permittee shall conduct visual inspections of the scrubber's spray nozzles every twelve (12) months. At a minimum, each spray nozzle shall be inspected for the following:

a. excessive wear, or clogging; and

b. appropriate directional output to ensure that the spray is covering the entire gas stream. Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) The permittee shall maintain a supply of replacement nozzles, or any other parts necessary to ensure that the scrubbing system will operate properly. Any worn, or clogged nozzles shall be replaced, or fixed during the inspection.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(7) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2525	Notifications, Reports and Records – What records must I keep?
63.2525(a)	Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
63.2525(b)	Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.

63.2525(f)	A record of each time a safety device is opened to avoid unsafe conditions in accordance with 63.2450(s).
63.2525(j)	In the SSMP required by 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

[OAC rule 3745-77-07(C)(1) and P0108972]

(8) The permittee shall maintain the following records for emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551, as described in Permit to Install application No. P0105861 submitted on December 22, 2009 in order to demonstrate that the ammonia and urea units modification project does not trigger a major modification for PE, $PM_{10}/PM_{2.5}$, SO2, NOx, CO, and VOC:

a. the projected actual annual emissions for PE, $PM_{10}/PM_{2.5}$, SO2, NOx, CO, and VOC, in tons per year, from the ammonia and urea units modification project as submitted in the application for PTI No. P0105861 on December 22, 2009; and

b. the total actual annual emissions for PE, $PM_{10}/PM_{2.5}$, SO2, NOx, CO, and VOC, in tons per year, from emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, P525, P526, P527, P528, P529, P536, P554, P555, P560, P563, P564, T518, T537, and T551 combined, for five calendar years after commencing operation of the ammonia and urea units modification project.

[OAC rule 3745-77-07(C)(1) and P0108972]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at the required levels established pursuant to sections c)(1)d. through c)(1)f. for this emissions unit:

a. the scrubber blower amps; and

b. the scrubber water flow rate.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), P0108972 and 40 CFR, Part 64]

(2) The permittee shall submit quarterly summary reports that include a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

[OAC rule 3745-77-07(C)(1), P0108972 and 40 CFR, Part 64]

(3) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. Each period of time (start time and date and end time and date) when the scrubber blower amps or liquid flow rate was/were outside of the applicable limit(s) contained in this permit;

b. Any period of time (start time and date and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;

c. Each incident of deviation described in e)(3)a. or e)(3)b. above where a prompt investigation was not conducted;

d. Each incident of deviation described in e)(3)a. or e)(3)b. where prompt corrective action that would bring the blower amps and/or liquid flow rate into compliance with the applicable limit was determined to be necessary and was not taken; and

e. Each incident of deviation described in e)(3)a. or e)(3)b. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and recordkeeping requirements of this permit.

[OAC rule 3745-77-07(C)(1), P0108972 and 40 CFR, Part 64]

(4) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office, as are required pursuant to 40 CFR, Part 63, Subpart FFFF, per the following sections:

63.2450(m)	Reporting
63.2515	Notifications, Reports and Records – What notifications must I submit and when?
63.2515(a)	You must submit all of the notifications in 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
63.2515(b)	Initial notification (the initial notification was submitted in 2004)
63.2520	Notifications, Reports and Records – What reports must I submit and when?
63.2520(a)	You must submit each report in Table 11 to this subpart that applies to you.
63.2520(b)	Unless the Administrator has approved a different schedule for submission of reports under 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of

	this section.
63.2520(d)	Notification of compliance status report
63.2520(e)	Compliance report
Table 11	Requirements for Reports

[OAC rule 3745-77-07(C)(1) and P0108972]

(5) The permittee shall notify the Northwest District Office in writing if annual emissions from all emissions units in the ammonia and urea modification, as specified in d)(5)b., result in a significant PE, $PM_{10}/PM_{2.5}$, SO2, NOx, CO, and/or VOC emissions increase and exceed the projected actual PE, $PM_{10}/PM_{2.5}$, SO2, NOx, CO, and VOC emissions contained in the application for PTI No. P0105861, submitted December 22, 2009. This notification shall identify the cause for the significant emissions increase and the estimated PE, $PM_{10}/PM_{2.5}$, SO2, NOx, CO, and/or VOC emissions. This notification shall be submitted to the Northwest District Office within 120 days after the end of such year.

[OAC rule 3745-77-07(C)(1) and P0108972]

f) Testing Requirements

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

a. Emission Limitation:

Visible PE shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with 40 CFR, Part 60, Appendix A, Method 9.

[OAC rule 3745-77-07(C)(1) and P0108972]

b. Emission Limitation:

0.016 gr/dscf for PE;

3.34 lbs of PE/hr; and

14.62 tons of PE/yr.

Applicable Compliance Method

Compliance with the gr/dscf and hourly limitations was demonstrated on March 23, 2011.

If required, further compliance with the gr/dscf and hourly limitations shall be determined in accordance with the test methods and procedures of 40 CFR, Part 60, Appendix A, Methods 1-5.

The annual limitation was developed by multiplying the hourly emission rate by 8,760 hours per year and dividing by 2,000 lbs. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, it shall be a rebuttable presumption that compliance with the annual emission limitation has been attained.

[OAC rule 3745-77-07(C)(1) and P0108972]

c. Emission Limitation:

0.010 gr/dscf for PM_{10} (filterable):

2.00 lbs of PM_{10}/hr (filterable); and

8.77 tons of PM_{10}/yr (filterable).

Applicable Compliance Method:

The gr/dscf and hourly limitations were developed using stack test results for filterable particulate emissions (March 23, 2011) and particle size data from AP-42, Table 8.2-2 (7/93, reformatted 1/95). Compliance with the gr/dscf and hourly limitations will not be able to be determined using the test methods and procedures of Methods 201/201A of 40 CFR, Part 51, Appendix M or alternative U.S. EPA approved test methods due to the presence of entrained water droplets within the scrubber exhaust. The permittee will be required to demonstrate compliance by actual emissions testing at the time appropriate methodologies become available.

Additionally, the permittee will be required to perform stack testing if the scrubber exhaust conditions involving entrained water droplets change such that Methods 201/201A of 40 CFR, Part 51, Appendix M or alternative U.S. EPA approved test methods can be properly applied.

The annual limitation was developed by multiplying the hourly emission rate by 8,760 hours per year and dividing by 2,000 lbs. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, it shall be a rebuttable presumption that compliance with the annual emission limitation has been attained.

[OAC rule 3745-77-07(C)(1) and P0108972]

d. Emission Limitation:

0.007 gr/dscf for $PM_{2.5}$ (filterable);

1.43 lbs of $PM_{2.5}$/hr (filterable); and

6.28 tons of $PM_{2.5}$/yr (filterable).

Applicable Compliance Method:

The gr/dscf and hourly limitations were developed using stack test results for filterable particulate emissions (March 23, 2011) and particle size data from AP-42, Table 8.2-2 (7/93, reformatted 1/95). Compliance with the gr/dscf and hourly limitations will not be able to be determined using the test methods and procedures of Methods 201/201A of 40 CFR, Part 51, Appendix M or alternative U.S. EPA approved test methods due to the presence of entrained water droplets within the scrubber exhaust. The permittee will be required to demonstrate compliance by actual emissions testing at the time appropriate methodologies become available.

Additionally, the permittee will be required to perform stack testing if the scrubber exhaust conditions involving entrained water droplets change such that Methods 201/201A of 40 CFR, Part 51, Appendix M or alternative U.S. EPA approved test methods can be properly applied.

The annual limitation was developed by multiplying the hourly emission rate by 8,760 hours per year and dividing by 2,000 lbs. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, it shall be a rebuttable presumption that compliance with the annual emission limitation has been attained.

[OAC rule 3745-77-07(C)(1) and P0108972]

g) Miscellaneous Requirements

(1) None.

10. P528, Urea Crystallizer Section

Operations, Property and/or Equipment Description:

urea plant prilling section - crystallizer and associated equipment with condensers

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07	See b)(2)a.
b.	OAC rule 3745-21-09(DD)	See b)(2)b., d)(1) and (e)(1)
c.	40 CFR, Part 63, Subpart FFFF [40 CFR 63.2430 – 63.2550] In accordance with 40 CFR63.2440, this emissions unit is an existing affected source consisting of a crystallizer, evaporator, crystallizer heater, condensers, centrifuge and associated equipment;which is part of a miscellaneous organic chemical manufacturing process unit at an existing chemicalmanufacturing facility subject to the emissionlimitations/controlmeasures specified in this section.	See b)(2)c., d)(2) and e)(2)
d.	40 CFR 63.1-15 [40 CFR 63.2540]	Table 12 to 40 CFR, Part 63, Subpart FFFF – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. On February 18, 2008, Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The rule rescindment and new rule [OAC rule 3745-21-07(M)(4)] shall be federally

enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP).

Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07(M)(4), the requirement to comply with OAC rule 3745-21-07(G)(1) still exists as part of the federally-approved SIP of Ohio.

b. The permittee shall comply with the applicable requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(1)	Compliance requirements
OAC rule 3745-21-09(DD)(3)	Compressors
OAC rule 3745-21-09(DD)(4)	Pressure relief devices in gas/vapor service
OAC rule 3745-21-09(DD)(5)	Sampling connection systems
OAC rule 3745-21-09(DD)(6)	Open-ended valves or lines
OAC rule 3745-21-09(DD)(7)	Equipment designated for no detectable emissions
OAC rule 3745-21-09(DD)(8)	Barrier fluid systems and sensors for pumps and compressors
OAC rule 3745-21-09(DD)(9)	Closed vent systems
OAC rule 3745-21-09(DD)(10)	Control equipment
OAC rule 3745-21-09(DD)(11)	Delay of repair
OAC rule 3745-21-09(DD)(16)	Equivalent requirements
OAC rule 3745-21-09(DD)(17)	Exemptions
OAC rule 3745-21-09(DD), Appendix A	List of organic chemicals for which paragraph (DD) of Rule 3745-21-09 is applicable

c. The permittee shall comply with the additional terms and conditions under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2445(b) through 63.2445(d)	When do I have to comply with this subpart
63.2450(a)	You must be in compliance with the emission limits and work practice standards in tables 1 through 7* to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 63.2455 through 63.2490 (or the alternative means of compliance in 63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in 63.2515, 63.2520, and 63.2525. * only the work practice standards listed in Table 6 are applicable
63.2450(p)	Opening a safety device, as defined in 63.2550, is allowed at any time conditions require it to avoid unsafe conditions
63.2455	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for continuous process vents?
63.2455(a)	You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section. [Note: There are no emission limits and/or work practice standards in Table 1 that are applicable.]
63.2455(b)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.

63.2480	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for equipment leaks?
63.2480(a)	You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section. [See Table 6 below for requirements.]
63.2480(b)	If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
63.2535	Other Requirements and Information – What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2535(k)	Compliance with 40 CFR, part 60, subpart VV and 40 CFR, part 61, subpart V
63.2540	Other Requirements and Information – What parts of the General Provisions apply to me?
Table 6	Requirements for Equipment Leaks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(2)	Leak detection and repair program
OAC rule 3745-21-09(DD)(12)	Alternative monitoring schedule for valves based on a skip period
OAC rule 3745-21-09(DD)(13)	Alternative monitoring standard for valves based on the allowable percentage of valves leaking

OAC rule 3745-21-09(DD)(14)	Record keeping

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2525	Notifications, Reports and Records – What records must I keep?
63.2525(a)	Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
63.2525(b)	Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.
63.2525(f)	A record of each time a safety device is opened to avoid unsafe conditions in accordance with 63.2450(s).
63.2525(j)	In the SSMP required by 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under OAC rule 3745-21-09(DD), including the following section:

OAC rule 3745-21-09(DD)(15)	Reporting

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office, as are required pursuant to 40 CFR, Part 63, Subpart FFFF, per the following sections:

63.2450(m)	Reporting
63.2515	Notifications, Reports and Records – What notifications must I submit and when?
63.2515(a)	You must submit all of the notifications in 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
63.2515(b)	Initial notification* * the company submitted the initial notification in 2004
63.2520	Notifications, Reports and Records – What reports must I submit and when?
63.2520(a)	You must submit each report in Table 11 to this subpart that applies to you.
63.2520(b)	Unless the Administrator has approved a different schedule for submission of reports under 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.
63.2520(d)	Notification of compliance status report
63.2520(e)	Compliance report
Table 11	Requirements for reports

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

11. P529, Urea Plant Concentrator Section

Operations, Property and/or Equipment Description:

urea plant concentrator section with condensers

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07	See b)(2)a.
b.	OAC rule 3745-21-09(DD)	See b)(2)b., d)(1) and e)(1)
c.	40 CFR, Part 63, Subpart FFFF [40 CFR 63.2430 – 63.2550] In accordance with 40 CFR63.2440, this emissions unit is an existing affected source consisting of a stripper, concentrator, process tanks and associated equipment;which is part of a miscellaneous organic chemical manufacturing process unit at an existing chemicalmanufacturing facility subject to the emissionlimitations/control measuresspecified in this section.	See b)(2)c., d)(2) and e)(2)
d.	40 CFR 63.1-15 [40 CFR 63.2540]	Table 12 to 40 CFR, Part 63, Subpart FFFF – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. On February 18, 2008, Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The rule rescindment and new rule [OAC rule 3745-21-07(M)(4)] shall be federally

enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP).

Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07(M)(4), the requirement to comply with OAC rule 3745-21-07(G)(1) still exists as part of the federally-approved SIP of Ohio.

b. The permittee shall comply with the applicable restrictions required under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(1)	Compliance requirements
OAC rule 3745-21-09(DD)(3)	Compressors
OAC rule 3745-21-09(DD)(4)	Pressure relief devices in gas/vapor service
OAC rule 3745-21-09(DD)(5)	Sampling connection systems
OAC rule 3745-21-09(DD)(6)	Open-ended valves or lines
OAC rule 3745-21-09(DD)(7)	Equipment designated for no detectable emissions
OAC rule 3745-21-09(DD)(8)	Barrier fluid systems and sensors for pumps and compressors
OAC rule 3745-21-09(DD)(9)	Closed vent systems
OAC rule 3745-21-09(DD)(10)	Control equipment
OAC rule 3745-21-09(DD)(11)	Delay of repair
OAC rule 3745-21-09(DD)(16)	Equivalent requirements
OAC rule 3745-21-09(DD)(17)	Exemptions
OAC rule 3745-21-09(DD), Appendix A	List of organic chemicals for which paragraph (DD) of Rule 3745-21-09 is applicable

c. The permittee shall comply with the additional terms and conditions under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2445(b) through 63.2445(d)	When do I have to comply with this subpart?
63.2450	Emission Limitations, Work Practice Standards and Compliance Requirements -- What are my general requirements for

	complying with this subpart
63.2450(a)	You must be in compliance with the emission limits and work practice standards in tables 1 through 7* to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 63.2455 through 63.2490 (or the alternative means of compliance in 63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, andrecordkeeping requirements specified in 63.2515, 63.2520, and 63.2525. * only the work practice standards listed in Table 6 are applicable
63.2450(p)	Opening a safety device, as defined in 63.2550, is allowed at any time conditions require it to avoid unsafe conditions
63.2455	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for continuous process vents?
63.2455(a)	You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section. [Note: There are no emission limits and/or work practice standards in Table 1 that are applicable.]
63.2455(b)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.
63.2480	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for equipment leaks?

63.2480(a)	You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section. [See Table 6 below for requirements.]
63.2480(b)	If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
63.2535	Other Requirements and Information – What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2535(k)	Compliance with 40 CFR, part 60, subpart VV and 40 CFR, part 61, subpart V
63.2540	Other Requirements and Information – What parts of the General Provisions apply to me?
Table 6	Requirements for Equipment Leaks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(2)	Leak detection and repair program
OAC rule 3745-21-09(DD)(12)	Alternative monitoring schedule for valves based on a skip period
OAC rule 3745-21-09(DD)(13)	Alternative monitoring standard for valves based on the allowable percentage of valves leaking
OAC rule 3745-21-09(DD)(14)	Record keeping

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2525	Notifications, Reports and Records – What records must I keep?
63.2525(a)	Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
63.2525(b)	Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.
63.2525(f)	A record of each time a safety device is opened to avoid unsafe conditions in accordance with 63.2450(s).
63.2525(j)	In the SSMP required by 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under OAC rule 3745-21-09(DD), including the following section:

OAC rule 3745-21-09(DD)(15)	Reporting

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office, as are required pursuant to 40 CFR, Part 63, Subpart FFFF, per the following sections:

63.2450(m)	Reporting
63.2515	Notifications, Reports and Records – What notifications must I submit and when?
63.2515(a)	You must submit all of the notifications in 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

63.2515(b)	Initial notification* * the company submitted the initial notification in 2004
63.2520	Notifications, Reports and Records – What reports must I submit and when?
63.2520(a)	You must submit each report in Table 11 to this subpart that applies to you.
63.2520(b)	Unless the Administrator has approved a different schedule for submission of reports under 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.
63.2520(d)	Notification of compliance status report
63.2520(e)	Compliance report
Table 11	Requirements for reports

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

12. P531, Ammonium Nitrate Neutralizer System

Operations, Property and/or Equipment Description:

ammonium nitrate neutralizer system, equipped with a condenser and two wet scrubbers

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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(1)	15.4 lbs PE/hr
c.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7), and e)(3)

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pressure drop across the neutralizer scrubbers shall be continuously maintained at a value greater than or equal to 0.33 inches water column, as a daily average, at all times while the emissions unit is in operation. This operational restriction was established through a series of diagnostic and compliance stack tests in 2004 and 2005, and was approved in a letter to the permittee dated August 19, 2005.

[OAC rule 3745-77-07(A)(1)]

(2) The scrubber water circulation flow rate shall be continuously maintained at a value greater than or equal to 41.41 gallons per minute, as a daily average, at all times while the emissions unit is in operation. This operational restriction was established through a series of diagnostic and compliance stack tests in 2004 and 2005, and was approved in a letter to the permittee dated August 19, 2005.

[OAC rule 3745-77-07(A)(1)]

(3) The permittee may petition to the Ohio EPA for reestablishment, based on emissions testing or the collection of data, of the scrubber pressure drop and water circulation flow rate values provided the permittee can demonstrate to the Ohio EPA's satisfaction that the new values will reasonably ensure compliance and the basis upon which the values were previously established is no longer applicable.

The operation of the control equipment outside the values established above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Northwest District Office, compliance with the mass emission limitations and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emission readings, using U.S. EPA approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the values that will be established above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations. In addition, the permittee may provide other relevant credible evidence to the Ohio EPA to demonstrate that a deviation of an operational restriction is not a violation of the applicable mass emission and/or visible emission limitations.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the scrubbers controlling this emissions unit are the scrubber pressure drop and the scrubber water circulation flow rate which were established in accordance with the manufacturer's recommendations and verified during site-specific particulate emission testing and scrubber parametric data collected during the emission testing. When the pressure drop and/or the water circulation flow rate of the scrubbers are operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The scrubbers shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall operate and maintain equipment to monitor the scrubber pressure drop and the scrubber water circulation flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each shift:

a. the scrubber pressure drop; in inches water column;

b. the scrubber water circulation flow rate, in gallons per minute; and

c. a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

Whenever the monitored values for the scrubber pressure drop and/or scrubber water circulation flow rate deviate from the range specified in section c)(1) and/or c)(2), the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit. In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified in section c)(1) and/or c)(2) unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the scrubber pressure drop and/or scrubber water circulation flow rate immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(3) Scrubber operating parameters shall be re-verified as a result of any changes to the operating conditions of the scrubbers or emissions unit. In addition to periodic monitoring of their scrubber operating parameters, the permittee also has an inspection and maintenance program for the scrubbers. Based on the results of the monitoring and inspection program, repairs to the scrubbers shall be made as needed. If the current CAM indicators and/or the scrubber inspection program is considered inadequate, the permittee will develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) In addition to the parametric monitoring required in Section d)(2), the permittee shall conduct visual inspections of the scrubbers every twelve (12) months. At a minimum, each scrubber shall be inspected for the following:

a. scrubber trays for excessive wear; and

b. any other mechanical parts associated with the tray mounts, for excessive wear. Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(7) The permittee shall maintain a supply of any parts necessary to ensure that the scrubbing system will operate properly. Any worn parts shall be replaced, or fixed during the inspection.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at the required levels established pursuant to Section c)(1) and c)(2) for this emissions unit:

a. the pressure drop across the scrubber; and

b. the scrubber water circulation flow rate.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly summary reports that include a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. an identification of each incident of deviation described in e)(1)(a) and e)(1)(b) above where a prompt investigation was not conducted;

b. an identification of each incident of deviation described in e)(1)(a) and e)(1)(b) above where prompt corrective action, that would bring the scrubber pressure drop and/or the scrubber water circulation flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and

c. an identification of each incident of deviation described in e)(1)(a) and e)(1)(b) above where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

15.4 lbs PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly PE limitation by multiplying an emission factor of 0.284 lb PE/ton times a maximum process weight rate of 18.75 tons per hour. The emission factor was derived from stack testing conducted on April 12, 2005 as follows:

Actual PE = 3.8 lbs PE/hr

Actual process weight rate during stack test = 13.387 tons/hr

Emission factor for PE = (3.8 lbs PE/hr)/(13.387 tons/hr) = 0.284 lb PE/ton

If required, compliance with the hourly PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

13. P536, West Urea Warehouse Operations

Operations, Property and/or Equipment Description:

prilled urea warehouse operations, equipped with a baghouse and scrubber (each is capable of controlling this emissions unit independently and meeting the emissions limits)

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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(1)	5.4 lbs PE/hr
c.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d)(1) through d)(5)
d.	OAC rule 3745-31-05(A)(3) (PTI #03-968, issued on 10/2/80)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)(1)

(2) Additional Terms and Conditions

a. There shall be no fugitive emissions from this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the baghouse and scrubber controlling this emissions unit is observation of whether visible emissions occur during operation of the west urea warehouse. If visible emissions are observed, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air

pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below.

The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse and scrubber shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

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

a. the color of the emissions:

b. whether the emissions are representative of normal operations;

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

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d)(2)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(3) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. spare set of belts; and

b. spare bearings for blower.

In the event the baghouse requires a shut down for maintenance, the permittee shall divert emissions to the scrubber for this emissions unit to conduct any or all of the following maintenance activities:

c. delivery of new bags for installation, from a regional vendor within 24 hours;

d. repair of timing boards and/or solenoid coils on-site;

e. fabricate new diaphragms on-site;

f. replacement of motor; and

g. replacement of blower bearings.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) The permittee shall maintain a supply of replacement nozzles, or any other parts necessary to ensure that the scrubbing system will operate properly. Any worn, or clogged nozzles shall be replaced, or fixed during the inspection.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

5.4 lbs PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly PE limitation by multiplying an emission factor of 0.0073 lb PE/ton times a maximum process weight rate of 166.67 tons per hour . The emission factor was derived from stack testing conducted on September 28, 2004 as follows:

Actual PE = 0.55 lb PE/hr

Actual process weight rate during stack test = 75 tons/hr

Emission factor for PE = (0.55 lb PE/hr)/(75 tons/hr) = 0.0073 lb PE/ton

If required, compliance with the hourly PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

14. P546, Granulation Plant Duct Scrubber

Operations, Property and/or Equipment Description:

Urea granulation plant with a duct 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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
c.	OAC rule 3745-21-07	See b)(2)a.
d.	OAC rule 3745-21-09(DD)	See b)(2)b., d)(8) and e)(4)
e.	40 CFR, Part 60, Subpart VV (40 CFR 60.480 - 60.489) [In accordance with 40 CFR 60.480, this emissions unit is subject to the equipment leak standards specified in Subpart VV for the synthetic organic chemicals manufacturing industry.]	See b)(2)c., d)(9), e)(5) and f)(2).
f.	OAC rule 3745-31-05(A)(3) (PTI #03-968, issued on 10/2/80)	18.0 lbs PE/hr The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(A), 3745-21-09(DD) and 3745-17-11(B) and 40 CFR, Part 60, Subpart VV.
g.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7), and e)(3)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	40 CFR, Part 63, Subpart FFFF [40 CFR 63.2430 – 63.2550] In accordance with 40 CFR63.2440, this emissions unit is an existing affected source consisting of a granulator and associated equipment;which is part of a miscellaneous organic chemical manufacturing process unit at an existing chemicalmanufacturing facility subject to the emissionlimitations/controlmeasures specified in this section.	See b)(2)d., d)(10) and e)(6)
i.	40 CFR 63.1-15 [40 CFR 63.2540]	Table 12 to 40 CFR, Part 63, Subpart FFFF – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. On February 18, 2008, Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The rule rescindment and new rule [OAC rule 3745-21-07(M)(4)] shall be federally enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07(M)(4), the requirement to comply with OAC rule 3745-21-07(G)(1) still exists as part of the federally-approved SIP of Ohio.

b. The permittee shall comply with the applicable requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(1)	Compliance requirements
OAC rule 3745-21-09(DD)(3)	Compressors
OAC rule 3745-21-09(DD)(4)	Pressure relief devices in gas/vapor service
OAC rule 3745-21-09(DD)(5)	Sampling connection systems
OAC rule 3745-21-09(DD)(6)	Open-ended valves or lines

OAC rule 3745-21-09(DD)(7)	Equipment designated for no detectable emissions
OAC rule 3745-21-09(DD)(8)	Barrier fluid systems and sensors for pumps and compressors
OAC rule 3745-21-09(DD)(9)	Closed vent systems
OAC rule 3745-21-09(DD)(10)	Control equipment
OAC rule 3745-21-09(DD)(11)	Delay of repair
OAC rule 3745-21-09(DD)(16)	Equivalent requirements
OAC rule 3745-21-09(DD)(17)	Exemptions
OAC rule 3745-21-09(DD), Appendix A	List of organic chemicals for which paragraph (DD) of Rule 3745-21-09 is applicable

c. The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart VV, including the following sections:

60.482-1	Standards: General
60.482-2	Standards: Pumps in light liquid service
60.482-3	Standards: Compressors
60.482-4	Standards: Pressure relief devices in gas/vapor service
60.482-5	Standards: Sampling connection systems
60.482-6	Standards: Open-ended valves or lines
60.482-7	Standards: Valves in gas/vapor service and in light liquid service
60.482-8	Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.
60.482-9	Standards: Delay of repair
60.482-10	Standards: Closed vent systems and control devices

60.483-1	Alternative standards for valves--allowable percentage of valves leaking
60.483-2	Alternative standards for valves--skip period leak detection and repair.

d. The permittee shall comply with the additional terms and conditions under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2445(b) through 63.2445(d)	When do I have to comply with this subpart?
63.2450	Emission Limitations, Work Practice Standards and Compliance Requirements -- What are my general requirements for complying with this subpart?
63.2450(a)	You must be in compliance with the emission limits and work practice standards in tables 1 through 7* to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 63.2455 through 63.2490 (or the alternative means of compliance in 63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, andrecordkeeping requirements specified in 63.2515, 63.2520, and 63.2525. * only the work practice standards listed in Table 6 are applicable
63.2450(p)	Opening a safety device, as defined in 63.2550, is allowed at any time conditions require it to avoid unsafe conditions
63.2455	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for continuous process vents?
63.2455(a)	You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable

	requirement specified in paragraphs (b) through (c) of this section. [Note: There are no emission limits and/or work practice standards in Table 1 that are applicable.]
63.2455(b)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.
63.2480	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for equipment leaks?
63.2480(a)	You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section. [See Table 6 below for requirements.]
63.2480(b)	If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
63.2535	Other Requirements and Information – What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2535(k)	Compliance with 40 CFR, part 60, subpart VV and 40 CFR, part 61, subpart V
63.2540	Other Requirements and Information – What parts of the General Provisions apply to me?
Table 6	Requirements for Equipment Leaks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

c) Operational Restrictions

(1) The pressure drop across the scrubber shall be continuously maintained at a value greater than or equal to 1.3 inches water column, as a daily average, at all times while the emissions unit is in operation. This operational restriction was established through monitoring data, and was approved in a letter to the permittee dated October 12, 2006.

[OAC rule 3745-77-07(A)(1)]

(2) The scrubber water circulation flow rate shall be continuously maintained at a value greater than or equal to 54.35 gallons per minute, as a daily average, at all times while the emissions unit is in operation. This operational restriction was established through a series of diagnostic and compliance stack tests in 2004, and was approved in a letter to the permittee dated August 19, 2005.

[OAC rule 3745-77-07(A)(1)]

(3) The permittee may petition to the Ohio EPA for reestablishment, based on emissions testing or the collection of data, of the scrubber pressure drop and water circulation flow rate values provided the permittee can demonstrate to the Ohio EPA's satisfaction that the new values will reasonably ensure compliance and the basis upon which the values were previously established is no longer applicable.

The operation of the control equipment outside the values established above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Northwest District Office, compliance with the mass emission limitations and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emission readings, using U.S. EPA approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the values that will be established above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations. In addition, the permittee may provide other relevant credible evidence to the Ohio EPA to demonstrate that a deviation of an operational restriction is not a violation of the applicable mass emission and/or visible emission limitations.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the scrubbers controlling this emissions unit are the scrubber pressure drop and the scrubber water circulation flow rate which were established in accordance with the manufacturer's recommendations and verified during site-specific particulate emission testing and scrubber parametric data collected during the emission testing. When the pressure drop and/or the water circulation flow rate of the scrubbers are operating outside the indicator ranges, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance

with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in Section e) below.

The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The scrubbers shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall operate and maintain equipment to monitor the scrubber pressure drop and the scrubber water circulation flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each shift:

a. the scrubber pressure drop; in inches water column;

b. the scrubber water circulation flow rate, in gallons per minute; and

c. a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

Whenever the monitored values for the scrubber pressure drop and/or scrubber water circulation flow rate deviate from the range specified in section c)(1) and/or c)(2), the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit. In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified in section c)(1) and/or c)(2) unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the scrubber pressure drop and/or scrubber water circulation flow rate immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(3) Scrubber operating parameters shall be re-verified as a result of any changes to the operating conditions of the scrubbers or emissions unit. In addition to periodic monitoring of their scrubber operating parameters, the permittee also has an inspection and maintenance program for the scrubbers. Based on the results of the monitoring and inspection program, repairs to the scrubbers shall be made as needed.

If the current CAM indicators and/or the scrubber inspection program is considered inadequate, the permittee will develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes.

Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) In addition to the parametric monitoring required in Section d)(2), the permittee shall conduct visual inspections of the scrubber's spray nozzles every twelve (12) months. At a minimum, each spray nozzle shall be inspected for the following:

a. excessive wear, or clogging; and

b. appropriate directional output to ensure that the spray is covering the entire gas stream. Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(7) The permittee shall maintain a supply of replacement nozzles, or any other parts necessary to ensure that the scrubbing system will operate properly. Any worn, or clogged nozzles shall be replaced, or fixed during the inspection.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(8) The permittee shall comply with the applicable monitoring and record keeping requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(2)	Leak detection and repair program
OAC rule 3745-21-09(DD)(12)	Alternative monitoring schedule for valves based on a skip period
OAC rule 3745-21-09(DD)(13)	Alternative monitoring standard for valves based on the allowable percentage of valves leaking
OAC rule 3745-21-09(DD)(14)	Record keeping

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(9) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subpart VV, including the following sections:

60.486(a) through 60.486(k)	Identification of leaking components Maintain log of all leaking components. repair attempts and repair methods Maintain schematics, including piping and instrumentation diagrams Maintain lists of unsafe to monitor and difficult to monitor components Maintain monitoring schedule Maintain list of process unit shut downs that occur during monitoring periods

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart VV]

(10) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2525	Notifications, Reports and Records – What records must I keep?
63.2525(a)	Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
63.2525(b)	Records of each operating scenario as specified in paragraphs (b)(1) through (8)

	of this section.
63.2525(f)	A record of each time a safety device is opened to avoid unsafe conditions in accordance with 63.2450(s).

63.2525(j)	In the SSMP required by 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at the required levels established pursuant to Section c)(1) and c)(2) for this emissions unit:

a. the pressure drop across the scrubber; and

b. the scrubber water circulation flow rate.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly summary reports that include a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. an identification of each incident of deviation described in e)(1)(a) and e)(1)(b) above where a prompt investigation was not conducted;

b. an identification of each incident of deviation described in e)(1)(a) and e)(1)(b) above where prompt corrective action, that would bring the scrubber pressure drop and/or the scrubber water circulation flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and

c. an identification of each incident of deviation described in e)(1)(a) and e)(1)(b) above where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) The permittee shall comply with the applicable reporting requirements under OAC rule 3745-21-09(DD), including the following section:

OAC rule 3745-21-09(DD)(15)	Reporting

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(5) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office, as are required pursuant to 40 CFR Part 60, Subpart VV, per the following sections:

60.487(a) through 60.487(f)	Number of each type of component monitored each month Number of leaks for each type of component Number of components not repaired within the required time period Explanation for each delay of repair List of process unit shut downs

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart VV]

(6) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office, as are required pursuant to 40 CFR, Part 63, Subpart FFFF, per the following sections:

63.2450(m)	Reporting
63.2515	Notifications, Reports and Records – What notifications must I submit and when?
63.2515(a)	You must submit all of the notifications in 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
63.2515(b)	Initial notification* * the company submitted the initial notification in 2004
63.2520	Notifications, Reports and Records – What reports must I submit and when?
63.2520(a)	You must submit each report in Table 11 to this subpart that applies to you.
63.2520(b)	Unless the Administrator has approved a different schedule for submission of

	reports under 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.
63.2520(d)	Notification of compliance status report
63.2520(e)	Compliance report
Table 11	Requirements for Reports

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

18.0 lbs PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly PE limitation by multiplying an emission factor of 0.07 lb PE/ton times a maximum process weight rate of 31.25 tons per hour. The emission factor was derived from stack testing conducted on November 30, 2004 as follows:

Actual PE = 2.18 lbs PE/hr (combined emissions for emissions units P546 and P547)

Actual process weight rate during stack test = 28.79 tons/hr

Emission factor for PE = (2.18 lbs PE/hr)/(28.79 tons/hr) = 0.07 lb PE/ton

If required, compliance with the hourly PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable testing requirements under 40 CFR Part 60, Subpart VV, including the following sections:

60.485(a) through 60.485(h)	Reference methods for sample equipment used to detect component VOC leaks

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart VV]

g) Miscellaneous Requirements

(1) None.

15. P547, Granulator Plant Evaporator

Operations, Property and/or Equipment Description:

Urea granulator plant evaporator with a duct 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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
c.	OAC rule 3745-21-07	See b)(2)a.
d.	OAC rule 3745-21-09(DD)	See b)(2)b., d)(1) and e)(1)
e.	40 CFR, Part 60, Subpart VV (40 CFR 60.480 - 60.489) [In accordance with 40 CFR 60.480, this emissions unit is subject to the equipment leak standards specified in Subpart VV for the synthetic organic chemicals manufacturing industry.]	See b)(2)c., d)(2), e)(2) and f)(2).
f.	OAC rule 3745-31-05(A)(3) (PTI #03-968, issued on 10/2/80)	4.0 lbs PE/hr The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(A), 3745-21-09(DD) and 3745-17-11(B) and 40 CFR, Part 60, Subpart VV.

g.	40 CFR, Part 63, Subpart FFFF [40 CFR 63.2430 – 63.2550] In accordance with 40 CFR63.2440, this emissions unit is an existing affected source consisting of an evaporator, evaporator air heater, urea surge tank and associated equipment;which is part of a miscellaneous organic chemical manufacturing process unit at an existing chemicalmanufacturing facility subject to the emissionlimitations/controlmeasures specified in this section.	See b)(2)e., d)(3) and e)(3)
h.	40 CFR 63.1-15 [40 CFR 63.2540]	Table 12 to 40 CFR, Part 63, Subpart FFFF – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. On February 18, 2008, Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The rule rescindment and new rule [OAC rule 3745-21-07(M)(4)] shall be federally enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07(M)(4), the requirement to comply with OAC rule 3745-21-07(G)(1) still exists as part of the federally-approved SIP of Ohio.

b. The permittee shall comply with the applicable requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(1)	Compliance requirements
OAC rule 3745-21-09(DD)(3)	Compressors
OAC rule 3745-21-09(DD)(4)	Pressure relief devices in gas/vapor service
OAC rule 3745-21-09(DD)(5)	Sampling connection systems
OAC rule 3745-21-09(DD)(6)	Open-ended valves or lines
OAC rule 3745-21-09(DD)(7)	Equipment designated for no detectable emissions

OAC rule 3745-21-09(DD)(8)	Barrier fluid systems and sensors for pumps and compressors
OAC rule 3745-21-09(DD)(9)	Closed vent systems
OAC rule 3745-21-09(DD)(10)	Control equipment
OAC rule 3745-21-09(DD)(11)	Delay of repair
OAC rule 3745-21-09(DD)(16)	Equivalent requirements
OAC rule 3745-21-09(DD)(17)	Exemptions
OAC rule 3745-21-09(DD), Appendix A	List of organic chemicals for which paragraph (DD) of Rule 3745-21-09 is applicable

c. The permittee shall comply with the applicable requirements under 40 CFR Part 60, Subpart VV, including the following sections:

60.482-1	Standards: General
60.482-2	Standards: Pumps in light liquid service
60.482-3	Standards: Compressors
60.482-4	Standards: Pressure relief devices in gas/vapor service
60.482-5	Standards: Sampling connection systems
60.482-6	Standards: Open-ended valves or lines
60.482-7	Standards: Valves in gas/vapor service and in light liquid service
60.482-8	Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.
60.482-9	Standards: Delay of repair
60.482-10	Standards: Closed vent systems and control devices
60.483-1	Alternative standards for valves--allowable percentage of valves leaking

60.483-2	Alternative standards for valves--skip period leak detection and repair.

d. This emissions unit is vented to a scrubber that also controls the emissions from emissions unit P546. All operational restrictions, monitoring, record keeping, reporting and testing requirements for the scrubber are established in the terms and conditions for emissions unit P546 and are also applicable to emissions unit P547. Therefore, no additional monitoring, record keeping, reporting and testing requirements are necessary for the scrubber for this emissions unit.

e. The permittee shall comply with the additional terms and conditions under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2445(b) through 63.2445(d)	When do I have to comply with this subpart?
63.2450	Emission Limitations, Work Practice Standards and Compliance Requirements -- What are my general requirements for complying with this subpart?
63.2450(a)	You must be in compliance with the emission limits and work practice standards in tables 1 through 7* to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 63.2455 through 63.2490 (or the alternative means of compliance in 63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, andrecordkeeping requirements specified in 63.2515, 63.2520, and 63.2525. * only the work practice standards listed in Table 6 are applicable
63.2450(p)	Opening a safety device, as defined in 63.2550, is allowed at any time conditions require it to avoid unsafe conditions
63.2455(a)	You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable

	requirement specified in paragraphs (b) through (c) of this section. [Note: There are no emission limits and/or work practice standards in Table 1 that are applicable.]
63.2455(b)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.
63.2480	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for equipment leaks?
63.2480(a)	You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section. [See Table 6 below for requirements.]
63.2480(b)	If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
63.2535	Other Requirements and Information – What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2535(k)	Compliance with 40 CFR, part 60, subpart VV and 40 CFR, part 61, subpart V
63.2540	Other Requirements and Information – What parts of the General Provisions apply to me?
Table 6	Requirements for Equipment Leaks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(2)	Leak detection and repair program
OAC rule 3745-21-09(DD)(12)	Alternative monitoring schedule for valves based on a skip period
OAC rule 3745-21-09(DD)(13)	Alternative monitoring standard for valves based on the allowable percentage of valves leaking
OAC rule 3745-21-09(DD)(14)	Record keeping

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subpart VV, including the following sections:

60.486(a) through 60.486(k)	Identification of leaking components Maintain log of all leaking components. repair attempts and repair methods Maintain schematics, including piping and instrumentation diagrams Maintain lists of unsafe to monitor and difficult to monitor components Maintain monitoring schedule Maintain list of process unit shut downs that occur during monitoring periods

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart VV]

(3) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2525	Notifications, Reports and Records – What records must I keep?
63.2525(a)	Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
63.2525(f)	A record of each time a safety device is opened to avoid unsafe conditions in accordance with 63.2450(s).
63.2525(j)	In the SSMP required by 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under OAC rule 3745-21-09(DD), including the following section:

OAC rule 3745-21-09(DD)(15)	Reporting

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office as are required pursuant to 40 CFR Part 60, Subpart VV, per the following sections:

60.487(a) through 60.487(f)	Number of each type of component monitored each month Number of leaks for each type of component Number of components not repaired within the required time period Explanation for each delay of repair List of process unit shut downs

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart VV]

(3) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office, as are required pursuant to 40 CFR, Part 63, Subpart FFFF, per the following sections:

63.2450(m)	Reporting
63.2515	Notifications, Reports and Records – What notifications must I submit and when?
63.2515(a)	You must submit all of the notifications in 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
63.2515(b)	Initial notification* * the company submitted the initial notification in 2004
63.2520	Notifications, Reports and Records – What reports must I submit and when?
63.2520(a)	You must submit each report in Table 11 to this subpart that applies to you.
63.2520(b)	Unless the Administrator has approved a different schedule for submission of reports under 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.
63.2520(d)	Notification of compliance status report
63.2520(e)	Compliance report
Table 11	Requirements for Reports

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

4.0 lbs PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly PE limitation by multiplying an emission factor of 0.07 lb PE/ton times a maximum process weight rate of 31.25 tons per hour. The emission factor was derived from stack testing conducted on November 30, 2004 as follows:

Actual PE = 2.18 lbs PE/hr (combined emissions for emissions units P546 and P547)

Actual process weight rate during stack test = 28.79 tons/hr

Emission factor for PE = (2.18 lbs PE/hr)/(28.79 tons/hr) = 0.07 lb PE/ton

If required, compliance with the hourly PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable testing requirements under 40 CFR Part 60, Subpart VV, including the following sections:

60.485(a) through 60.485(h)	Reference methods for sample equipment used to detect component VOC leaks

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart VV]

g) Miscellaneous Requirements

(1) None.

16. P560, Urea Plant Prill Tower

Operations, Property and/or Equipment Description:

Urea plant prill tower with a washed filter media 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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(1)	50.0 lbs PE/hr
c.	OAC rule 3745-21-07	See b)(2)a.
d.	OAC rule 3745-21-09(DD)	See b)(2)b., d)(8) and e)(4)
e.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7), and e)(3)

(2) Additional Terms and Conditions

a. On February 18, 2008, Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The rule rescindment and new rule [OAC rule 3745-21-07(M)(4)] shall be federally enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07(M)(4), the requirement to comply with OAC rule 3745-21-07(G)(1) still exists as part of the federally-approved SIP of Ohio.

b. The permittee shall comply with the applicable requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(1)	Compliance requirements
OAC rule 3745-21-09(DD)(3)	Compressors

OAC rule 3745-21-09(DD)(4)	Pressure relief devices in gas/vapor service
OAC rule 3745-21-09(DD)(5)	Sampling connection systems
OAC rule 3745-21-09(DD)(6)	Open-ended valves or lines
OAC rule 3745-21-09(DD)(7)	Equipment designated for no detectable emissions
OAC rule 3745-21-09(DD)(8)	Barrier fluid systems and sensors for pumps and compressors
OAC rule 3745-21-09(DD)(9)	Closed vent systems
OAC rule 3745-21-09(DD)(10)	Control equipment
OAC rule 3745-21-09(DD)(11)	Delay of repair
OAC rule 3745-21-09(DD)(16)	Equivalent requirements
OAC rule 3745-21-09(DD)(17)	Exemptions
OAC rule 3745-21-09(DD), Appendix A	List of organic chemicals for which paragraph (DD) of Rule 3745-21-09 is applicable

c) Operational Restrictions

(1) The pressure drop across the washed filter media scrubber shall be maintained at a minimum value of 0.5 inch of water, while the emissions unit is in operation.

The permittee may petition to the Ohio EPA for reestablishment, based on emissions testing or the collection of data, of the washed filter media scrubber pressure drop value provided the permittee can demonstrate to the Ohio EPA's satisfaction that the new value will reasonably ensure compliance and the basis upon which the value was previously established is no longer applicable.

The operation of the control equipment outside the value established above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Northwest District Office, compliance with the mass emission limitations and visible emission limitations shall be determined by performing concurrent mass emission tests and visible emission readings, using U.S. EPA approved methods and procedures. The results of any required emission tests and visible emission readings shall be used in determining whether or not the operation of the control equipment outside the values that will be established above is indicative of a possible violation of the mass emission limitation and/or visible emission limitations. In addition, the permittee may provide other relevant credible evidence to the Ohio EPA to demonstrate that a deviation of an

operational restriction is not a violation of the applicable mass emission and/or visible emission limitations.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the scrubber controlling this emissions unit is the scrubber pressure drop which was established in accordance with the manufacturer's recommendations and verified during site-specific particulate emission testing and scrubber parametric data collected during the emission testing. When the pressure drop of the scrubber is operating outside the indicator range, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The scrubber shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall operate and maintain equipment to monitor the scrubber pressure drop while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each shift:

a. the scrubber pressure drop; in inches water column; and

b. a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

Whenever the monitored values for the scrubber pressure drop deviates from the range specified in section c)(1), the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit. In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified in section c)(1) unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time

the deviation ended, the total period of time (in minutes) during which there was a deviation, the scrubber pressure drop immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(3) Scrubber operating parameters shall be re-verified as a result of any changes to the operating conditions of the scrubber or emissions unit. In addition to periodic monitoring of their scrubber operating parameters, the permittee also has an inspection and maintenance program for the scrubbers. Based on the results of the monitoring and inspection program, repairs to the scrubber shall be made as needed. If the current CAM indicators and/or the scrubber inspection program is considered inadequate, the permittee will develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) In addition to the parametric monitoring required in Section d)(2), the permittee shall conduct visual inspections of the scrubber's spray nozzles every twelve (12) months. At a minimum, each spray nozzle shall be inspected for the following:

a. excessive wear, or clogging; and

b. appropriate directional output to ensure that the spray is covering the entire gas stream. Records of these inspections shall be kept in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(7) The permittee shall maintain a supply of replacement nozzles, or any other parts necessary to ensure that the scrubbing system will operate properly. Any worn, or clogged nozzles shall be replaced, or fixed during the inspection.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(8) The permittee shall comply with the applicable monitoring and record keeping requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(2)	Leak detection and repair program
OAC rule 3745-21-09(DD)(12)	Alternative monitoring schedule for valves based on a skip period
OAC rule 3745-21-09(DD)(13)	Alternative monitoring standard for valves based on the allowable percentage of valves leaking
OAC rule 3745-21-09(DD)(14)	Record keeping

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameter was not maintained at or above the required level established pursuant to Section c)(1) for this emissions unit:

a. the scrubber pressure drop.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly summary reports that include a log of the down time for the scrubber and monitoring equipment when the associated emissions unit was in operation.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. an identification of each incident of deviation described in e)(1)(a) above where a prompt investigation was not conducted;

b. an identification of each incident of deviation described in e)(1)(a) above where prompt corrective action, that would bring the scrubber pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

c. an identification of each incident of deviation described in e)(1)(a) above where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) The permittee shall comply with the applicable reporting requirements under OAC rule 3745-21-09(DD), including the following section:

OAC rule 3745-21-09(DD)(15)	Reporting

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

50.0 lbs PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly PE limitation by multiplying an emission factor of 0.50 lb PE/ton times a maximum process weight rate of 41.67 tons per hour. The emission factor was derived from stack testing conducted on December 16, 2004 as follows:

Actual PE = 18.4 lbs PE/hr

Actual process weight rate during stack test = 36.46 tons/hr

Emission factor for PE = (18.4 lbs PE/hr)/(36.46 tons/hr) = 0.50 lb PE/ton

If required, compliance with the hourly PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

17. P570, #2 Nitric Acid Plant

Operations, Property and/or Equipment Description:

450 tons/day Nitric Acid (100%) Plant (Plant #2),

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)(5), d)(6), d)(7), and e)(5)

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 #P0103658, modified and issued on 10/2/08)	1.60 lbs of nitrogen oxides (NOx)/ton of acid (100% nitric acid) produced except during periods of startup and shutdown [See b)(2)a.] See b)(2)c. and b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI #P0103658, modified and issued on 10/2/08)	80.78 tons of NOx per rolling, 365-day period (including emissions from startups and shutdowns) [See b)(2)f.]
c.	40 CFR, Part 60, Subpart G	See b)(2)b. and b)(2)d.

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) control for this emissions unit has been determined to be the use of a selective catalytic reduction (SCR) control system that achieves an emission rate of 1.60 lbs of NOx/ton of acid (100% nitric acid) produced except during periods of startup and shutdown.

b. The permittee shall not discharge into the atmosphere, except during startup and shutdown, any gases which:

i. Contain NOx, expressed as NO2, in excess of 3.0 lb per ton of acid produced, the production being expressed as 100% nitric acid; and

ii. Exhibit 10% opacity or greater.

c. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart G.

d. The lb NOx/ton of acid produced limitation specified by 40 CFR Part 60 Subpart G is less stringent than the lb NOx/ton of acid produced limitation established pursuant to OAC rule 3745-31-05(A)(3). 40 CFR Part 60 Subpart G requires a specific method for demonstrating compliance without any option of an alternative compliance method. This permit requires the use of a different method resulting in greater accuracy (as compared to the requirements of 40 CFR Part 60 Subpart G) for demonstrating compliance with the lb NOx/ton of acid produced limitation established by OAC rule 3745-31-05(A)(3). Due to the necessity for greater accuracy to demonstrate compliance with the limitation established by OAC rule 3745-31-05(A)(3) and the lack of an alternative compliance option in 40 CFR, Part 60, Subpart G, the establishment of two separate lbs NOx/ton of acid produced limitations is necessary.

e. The permittee shall submit a plan for quantifying NOx emissions during times of startup* and shutdown* when emissions exceed the capability of the NOx monitoring system (i.e., the NOx concentration exceeds the span range, etc.). The plan shall be submitted for review to the Ohio EPA, Northwest District Office within 60 days of final issuance of PTI #P0103658 and shall be implemented [as specified in d)(3) immediately upon approval.

* A startup consists of all periods of time when the reactor gauze temperature is below a minimum operating temperature of 1,700 degrees Fahrenheit while bringing the unit online. A shutdown consists of all periods of time when the reactor gauze temperature is below a minimum operating temperature of 1,200 degrees Fahrenheit while bringing the unit offline.

f. PTI #P0103658 establishes the following federally enforceable emission limitation for purposes of avoiding Prevention of Significant Deterioration (PSD) applicability:

Annual emissions (including emissions from startups and shutdowns) shall not exceed 80.78 tons NOx per rolling, 365-day period.

To ensure enforceability during the first 12 calendar months of operation under the provisions of PTI #P0103658, the permittee shall not exceed the emission levels specified in the following table:

Months	Maximum Allowable Cumulative Emissions of NOx (in tons)
1	17.00
1-2	34.00
1-3	51.00
1-4	68.00

Months	Maximum Allowable Cumulative Emissions of NOx (in tons)
1-5	80.78
1-6	80.78
1-7	80.78
1-8	80.78
1-9	80.78
1-10	80.78
1-11	80.78
1-12	80.78

After the first 12 calendar months of operation under the provisions of PTI #P0103658, compliance with the annual emission limitation for NOx shall be based upon a rolling, 365-day summation of the daily emissions.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform the following monitoring and record keeping requirements contained in 40 CFR, Part 60, Subpart G for purposes of demonstrating compliance with the 3.0 lb NOx per ton of acid produced limitation:

a. The permittee shall operate and maintain a continuous monitoring system for measuring NOx. The pollutant gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d) of this part shall be nitrogen dioxide (NO2). The span value shall be 500 ppm of NO2. Method 7 shall be used for the performance evaluations under 40 CFR 60.13(c). Acceptable alternative methods to Method 7 are given in 40 CFR 60.74(c). [40 CFR 60.73(a)]

b. The permittee shall establish a conversion factor for the purpose of converting monitoring data into units of applicable standard (kg/metric ton, lb/ton). The conversion factor shall be established by measuring emissions with the continuous monitoring system concurrent with measuring emissions with the applicable reference method tests. Using only that portion of the continuous monitoring emission data that represents emission measurements concurrent with the reference method test periods, the conversion factor shall be determined

by dividing the reference method test data averages by the monitoring data averages to obtain a ratio expressed in units of the applicable standard to units of the monitoring data, i.e., kg/metric ton per ppm (lb/ton per ppm). The conversion factor shall be re-established during any performance test under 40 CFR 60.8 or any continuous monitoring system performance evaluation under 40 CFR 60.13(c). [40 CFR 60.73(b)]

c. The permittee shall record the daily production rate and the hours of operation. [40 CFR 60.73(c)]

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart G and PTI #P0103658]

(2) The permittee shall perform the following monitoring and recordkeeping requirements for purposes of quantifying NOx emissions which will be used in demonstrating ongoing compliance with the 1.60 lb NOx per ton of acid (100% nitric acid) produced limitation and the emission limitation of 80.78 tons NOx per rolling 365-day period:

a. The permittee shall operate and maintain equipment to continuously monitor and record NOx from thisemissions unit in appropriate units (lbs/day) to be used to demonstrate compliance with the NOx limitations presented above. Such continuous monitoring and recording equipment shallcomply with the requirements specified in 40 CFR Part 60.13.

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

c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOxmonitoring system designed to ensure continuous valid and representative readings of NOx. The plan shallfollow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and alogbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspectionduring regular office hours.

d. A statement of certification of the existing continuous NOx monitoring system shall be maintained on siteand shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certificationtests and a statement by the Agency that the system is considered certified in accordance with therequirements of 40 CFR, Part 60, Appendix B, Performance Specification 2 and/or 40 CFR, Part 75. Proof ofcertification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

In lieu of installing a continuous emissions monitoring system (CEM) for NOx (to demonstrate compliance with the NOx limitations of 1.60 lbs per ton of acid produced and 80.87 tons per rolling, 365-day period), the permittee may elect to installa predictive emission monitoring system (PEMS) for quantifying NOx emissions. The PEMS must meet 'ExampleSpecifications and Test Procedures for Predictive Emission Monitoring Systems' as written by the UnitedStates

Environmental Protection Agency, and the proposed system shall be approved in writing by Ohio EPAprior to installation. At such time that a performance specification for PEMS is promulgated, the PEMS shallbe required to meet the promulgated requirements.

After initial testing to assure the PEMS meets the 'Example Specifications and Test Procedures for PredictiveEmission Monitoring Systems', or when available, the promulgated performance specification, ongoing qualityassurance/quality control shall include a relative accuracy test audit (RATA) once every four (or less) calendarquarters. RATA requirements are in addition to any and all PEMS manufacturer-suggested qualityassurance/quality control procedures. RATA requirements shall include multi-load, multi-fuel (whenapplicable) testing. RATA testing shall be completed using the appropriate 40 CFR 60, Appendix A testmethods (Methods 7E, 3A and 1-4 as necessary). RATA testing protocol shall be submitted to the Director (theOhio EPA, Central Office) for approval prior to installation of the PEMS.

e. The permittee shall calculate and record the following information for purposes of determining compliance with the 1.60 lb of NOx per ton of acid produced:

The emission rate (E) of NOx shall be computed using the following equation:

$E = (Q_{NOx})/P$

where

E = emission rate of NOx as NO2, lb/ton of 100% nitric acid

Q_{NOx} = NOx emissions quantified by CEM/PEM, lbs/day

P = acid production rate, ton/day for 100% nitric acid

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart G and PTI #P0103658]

(3) The permittee shall maintain daily records of the following information for this emissions unit:

a. The total NOx emissions, in lbs/day, as quantified by the CEM/PEM [see d)(2)].

b. The total NOx emissions, in lbs/day, from startup and shutdown events during which emissions exceed the capability of the NOx monitoring system. The NOx emissions shall be determined in accordance with the requirement contained in b)(2)e.

c. The total NOx emission rate, in lbs/day, [summation of d)(3)a. and d)(3)b.]

d. The rolling, 365-day NOx emission rate, in tons.

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

(4) The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow for any visible particulate emissions from the stack serving the emissions unit.

The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. The color of the emissions;

b. Whether the emissions are representative of normal emissions;

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

d. The total duration of any visible emissions incident; and

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

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

(5) The Permit to Install for this emissions unit was evaluated based on the actual materials and design parameters of the emissions unit's exhaust system, as specified in the permit application. The "Toxic Air Contaminant Statute," ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application. Modeling was performed for each toxic air contaminant emitted at over one ton per year using the SCREEN 3.0 air dispersion model. The predicted 1-hour maximum ground-level concentration results 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 Toxic Air Emissions, Option A," as follows:

a. The exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour work day and 40-hour work week, for each toxic compound emitted from the emissions unit, 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. TLV (threshold limit value) 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 ACGIH's "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 then adjusted to account for the duration of the exposure or the operating hours of the emissions unit, i.e., "X" hours per day and "Y" hours per week, from that of 8 hours per day and 5 days per week. The resulting calculation was used to determine the MAGLC:

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

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

Toxic Contaminant: Ammonia

TLV (mg/m3): 17.41

Maximum Hourly Emission Rate (lbs/hr): 0.46

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.566

MAGLC (ug/m3): 415.00

The permittee has demonstrated that emissions of ammonia are calculated to be less than 80% of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each toxic air contaminant in accordance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F).

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

(6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute" in 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 modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. The MAGLC for each significant toxic contaminant or worst case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute";

c. A copy of the computer model runs that establish the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit to be in compliance with the "Toxic Air Contaminant Statute," initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

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

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

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

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

e) Reporting Requirements

(1) For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as any 3-hour period during which the average nitrogen oxide emissions (arithmetic average of three contiguous 1-hour periods), as measured by a continuous monitoring system, exceed the standard under 40 CFR 60.72(a). [40 CFR 60.73(e)]

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart G and PTI #P0103658]

(2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its two separate continuous NO_x monitoring systems [CEM for 3.0 lbs NOx/ton of acid, CEM/PEM for 1.60 lbs NOx/ton of acid and 80.87 tons NOx per rolling 365-day period [see d)(1) and d)(2)]:

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 Ohio EPA,Northwest District Office, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permitand 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 date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date 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

[OAC rule 3745-77-07(C)(1), 40 CFR, Part 60, Subpart A and PTI #P0103658]

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

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

(4) The permitee shall submit quarterly deviation (excursion) reports that identify the following:

a. for the first 12 calendar months of operation under the provisions of this permit, all exceedances of the maximum allowable cumulative emissions of NOx; and

b. after the first 12 calendar months of operation under the provisions of this permit, all exceedances of the rolling, 365-day NOx emission limitation.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

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

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

1.60 lbs of NOx/ton of acid produced (100% nitric acid), except during periods of startup and shutdown

Applicable Compliance Method:

Compliance with the NOx emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 – 4 and 7 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

b. Emission Limitation:

3.00 lbs of NOx/ton of acid produced (100% nitric acid), except during periods of startup and shutdown

Applicable Compliance Method:

Compliance with the NOx emission limitation shall be based on the results of emission testing conducted in accordance with Methods 1 – 4 and 7 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

c. Emission Limitation:

80.78 tons of NOx per rolling, 365-day period (including emissions from startup and shutdown)

Applicable Compliance Method:

Compliance with the NOx emission limitation shall be based on the monitoring and record keeping in d)(3).

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

d. Emission Limitation:

The permittee shall not discharge into the atmosphere, except during periods of startup and shutdown, any gases which exhibit 10% opacity or greater.

Applicable Compliance Method:

Compliance with the opacity limitation shall be based on the results of emission testing conducted in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

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

a. The emission testing shall be conducted within the first winter time period of January 1st to February 28th (for purposes of achieving maximum acid production) after starting operations under modified conditions, as specified in PTI #P0103658.

b. The emissions testing shall be conducted to demonstrate compliance with the following limitations:

i. 1.60 lbs of NOx/ton of acid produced (100% nitric acid)

ii. 3.00 lbs of NOx/ton of acid produced (100% nitric acid)

iii. 10% opacity

c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates:

i. For NOx, Methods 1 – 4 and 7 of 40 CFR Part 60, Appendix A

ii. For opacity, Method 9 of 40 CFR Part 60, Appendix A

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

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

e. The permittee shall determine compliance with the NOx per ton of acid produced limitations as follows:

i. The emission rate (E) of NOx shall be computed for each run using the following equation:

E = (Cs x Qsd)/P

where

E = emission rate of NOx as NO2, lb/ton of 100% nitric acid

Cs = concentration of NOx as NO2, lb/dscf

Qsd = volumetric flow rate of effluent gas, dscf/hr

P = acid production rate, ton/hr for 100% nitric acid

ii. Method 7 shall be used to determine the NOx concentration of each grab sample. Method 1 shall be used to select sampling site, and the sampling point shall be the centroid of the stack or duct or at a point no closer to the wall than 1 m (3.28 ft). Four grab samples shall be taken at approximately 15-minute intervals. The arithmetic mean of the four sample concentrations shall constitute the run value (Cs).

iii. Method 2 shall be used to determine the volumetric flow rate (Qsd of the effluent gas). The measurement site shall be the same as for the NOx samples taken.

iv. The methods of 40 CFR 60.73(c) shall be used to determine the production rate (P) of the nitric acid for each run. Material balance over the production system shall be used to confirm the production rate.

f. The permittee may use the following as alternatives to the reference methods and procedures specified in this section:

i. For Method 7, Method 7A, 7B, 7C, 7D, or 7E may be used. If Method 7C is used, the sampling time shall be at least 1 hour.

ii. The permittee shall use the procedures in 40 CFR 60.73(b) to determine the conversion factor for converting the monitoring data to the units of the standard.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s) and the

person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emissions test(s).

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

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

[OAC rule 3745-77-07(C)(1) and PTI #P0103658]

g) Miscellaneous Requirements

(1) This emissions unit is subject to the applicable provisions of Subpart G of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR, Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR, Part 60 are also federally enforceable.

It should be noted that the permittee fulfilled the reporting requirements pursuant to 40 CFR, Part 60.7 during the permitting process that resulted in the issuance of PTI #03-05319 on 07/17/91.

18. P571, #1 Cooling Tower

Operations, Property and/or Equipment Description:

#1 cooling tower, nitric acid unit

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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(1)	50.0 lbs PE/hr

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall test and record the total dissolved solids content (mg/l) of the cooling water on a weekly basis using a conductivity meter or other U.S. EPA-approved test procedures.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall calculate the PE rate, in pounds/hr, using the methodology outlined in f)(1)b.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports, in accordance with the Standard Terms and Conditions of this permit, that identify all exceedances of the hourly PE limitation of 50.0 pounds.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

50.0lbs PE/hr

Applicable Compliance Method:

Compliance with this limitation may be demonstrated by multiplying the maximum water flow rate (gallons/hr) by the maximum dissolved solids content, based on record keeping established in section d)(1), and by the maximum drift loss factor (0.0002*), and then by the conversion factors of 3.785 l/gal and lb/453,592 mg.

*based on AP-42, Table 13.4-1

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

19. P572, #2 Cooling Tower

Operations, Property and/or Equipment Description:

#2 cooling tower, ammonia unit

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) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)(1)	107 lbs PE/hr

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall test and record the total dissolved solids content (mg/l) of the cooling water on a weekly basis using a conductivity meter or other U.S. EPA-approved test procedures.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall calculate the PE rate, in pounds/hr, using the methodology outlined in f)(1)b.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports, in accordance with the Standard Terms and Conditions of this permit, that identify all exceedances of the hourly PE limitation of 107 pounds.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

107lbs PE/hr

Applicable Compliance Method:

Compliance with this limitation may be demonstrated by multiplying the maximum water flow rate (gallons/hr) by the maximum dissolved solids content, based on record keeping established in section d)(1), and by the maximum drift loss factor (0.0002*), and then by the conversion factors of 3.785 l/gal and lb/453,592 mg.

*based on AP-42, Table 13.4-1

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

20. P577, #4 Cooling Tower

Operations, Property and/or Equipment Description:

#4 cooling tower

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(D) (PTI #P0110310, issued on 8/8/2012)	0.32 lb of particulate matter less than or equal to 10 microns in size (PM10)/hr 1.42 tons of PM10/yr See b)(2)a.
b.	OAC rule 3745-17-11(B)	See b)(2)b.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):

i. 0.32 lb PM10/hr; and

ii. 1.42 ton of PM10/yr

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit potential to emit [See b)(2)a.]:

a. The permittee shall not exceed a total dissolved solids (TDS) content of 6,000 mg/l in the cooling water for this emissions unit.

b. The use of a high efficiency drift eliminator capable of achieving an outlet drift factor of 0.00024 gallons drift per 100-gallons circulating water flow for PM10.

[OAC rule 3745-77-07(A)(1) and PTI #P0110310]

d) Monitoring and/or Recordkeeping Requirements

(1) Each month the permittee shall collect and record the following information for this emissions unit:

a. The permittee shall test and record the TDS content, in ppm or mg/l, of the cooling water at least once per month using a conductivity meter or other U.S. EPA-approved test procedures or an equivalent method approved by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI #P0110310]

(2) Each month, the permittee shall calculate and record PM10 emissions, in lbs per hr as a monthly average. The PM10 shall be calculated as follows:

[(45,000 gallons/minute) x (ppm TDS) x (0.00001) x (60 min/hr) x (0.0584) x (0.24)] / (7,000 grains/lb) = PM10, in lbs/hr

Where:

45,000 gallons/minute = the maximum water flow rate;

ppm TDS = the TDS level, on a monthly average basis, if more than one measurement is taken in a month;

0.00001 = the maximum drift loss factor;

60 min/hr = conversion factor for minutes to hours;

0.0584 = conversion factor for ppm to grains/gallon;

0.24 = PM10 emissions are 24% of the total PM emissions, per figure 1 of “Calculating Realistic PM10 emissions from Cooling Towers” (Abstract No. 216, Session No. AM-1b, Joel Reisman and Gordon Frisbie, Greystone Environmental Consultants, Inc., 04/11/2002); and

7,000 gr/lb = conversion factor for grains to pounds.

[OAC rule 3745-77-07(C)(1) and PTI #P0110310]

(3) Each month, the permittee shall use the information in d)(2) to calculate the cumulative PM10 to date, for the calendar year from January to December.

[OAC rule 3745-77-07(C)(1) and PTI #P0110310]

e) Reporting Requirements

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

a. Any exceedances of the TDS content restriction of 6,000 mg/l.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0110310]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

0.32 lb of PM10/hr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by the monitoring and record keeping requirements specified in sections d)(1) and d)(2).

[OAC rule 3745-77-07(C)(1) and PTI #P0110310]

b. Emission Limitation:

1.42 tons of PM10/yr

Applicable Compliance Method:

Compliance with the annual emission limitation shall be demonstrated by the monitoring and record keeping requirements specified in sections d)(3).

[OAC rule 3745-77-07(C)(1) and PTI #P0110310]

c. Emission Limitation:

Visible PE shall not exceed 20% opacity, as six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI #P0110310]

g) Miscellaneous Requirements

(1) None.

21. T560, Urea Formadehyde Storage Tank (UF-85)

Operations, Property and/or Equipment Description:

27,500 gallon, fixed roof urea formaldehyde storage tank (company tank ID #T-62)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07	See b)(2)a.
b.	OAC rule 3745-21-09(DD)	See b)(2)b., d)(1) and e)(1)
c.	40 CFR, Part 60, Subpart VV (40 CFR 60.480 through 60.489) [In accordance with 40 CFR 60.480, this emissions unit is subject to the equipment leak standards specified in Subpart VV for the synthetic organic chemicals manufacturing industry.]	See b)(2)c., d)(2), e)(2) and f)(1)
d.	OAC rule 3745-31-05(A)(3) (PTI #03-968, issued on 10/2/80)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-21-09(DD) and 40 CFR, Part 60, Subpart VV
e.	40 CFR, Part 63, Subpart FFFF [40 CFR 63.2430 – 63.2550] In accordance with 40 CFR63.2440, this emissions unit is an existing affected source consisting of a formaldehyde storage tank;which is part of a miscellaneous organic chemical manufacturing process unit at an existing chemicalmanufacturing facility subject to the emissionlimitations/control measuresspecified in this section.	See b)(2)d., d)(3) and e)(3)

f.	40 CFR 63.1-15 [40 CFR 63.2540]	Table 12 to 40 CFR, Part 63, Subpart FFFF – Applicability of General Provisions to Subpart FFFF shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. On February 18, 2008, Ohio EPA rescinded existing rule 3745-21-07 of the Ohio Administrative Code (OAC) and adopted new rule 3745-21-07. The rule rescindment and new rule [OAC rule 3745-21-07(M)(4)] shall be federally enforceable on the date the U.S. EPA approves a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the rule rescindment and new OAC rule 3745-21-07(M)(4), the requirement to comply with OAC rule 3745-21-07(G)(1) still exists as part of the federally-approved SIP of Ohio.

b. The permittee shall comply with the applicable requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(1)	Compliance requirements
OAC rule 3745-21-09(DD)(3)	Compressors
OAC rule 3745-21-09(DD)(4)	Pressure relief devices in gas/vapor service
OAC rule 3745-21-09(DD)(5)	Sampling connection systems
OAC rule 3745-21-09(DD)(6)	Open-ended valves or lines
OAC rule 3745-21-09(DD)(7)	Equipment designated for no detectable emissions
OAC rule 3745-21-09(DD)(8)	Barrier fluid systems and sensors for pumps and compressors
OAC rule 3745-21-09(DD)(9)	Closed vent systems
OAC rule 3745-21-09(DD)(10)	Control equipment
OAC rule 3745-21-09(DD)(11)	Delay of repair
OAC rule 3745-21-09(DD)(16)	Equivalent requirements
OAC rule 3745-21-09(DD)(17)	Exemptions
OAC rule 3745-21-09(DD), Appendix A	List of organic chemicals for which paragraph (DD) of Rule 3745-21-09 is

	applicable

c. The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart VV, including the following sections:

60.482-1	Standards: General
60.482-2	Standards: Pumps in light liquid service
60.482-3	Standards: Compressors
60.482-4	Standards: Pressure relief devices in gas/vapor service
60.482-5	Standards: Sampling connection systems
60.482-6	Standards: Open-ended valves or lines
60.482-7	Standards: Valves in gas/vapor service and in light liquid service
60.482-8	Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.
60.482-9	Standards: Delay of repair
60.482-10	Standards: Closed vent systems and control devices
60.483-1	Alternative standards for valves--allowable percentage of valves leaking
60.483-2	Alternative standards for valves--skip period leak detection and repair.

d. The permittee shall comply with the additional terms and conditions under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2445(b) through 63.2445(d)	When do I have to comply with this subpart?
63.2450	Emission Limitations, Work Practice Standards and Compliance Requirements -- What are my general requirements for complying with this

	subpart?
63.2450(a)	You must be in compliance with the emission limits and work practice standards in tables 1 through 7* to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in 63.2455 through 63.2490 (or the alternative means of compliance in 63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in 63.2515, 63.2520, and 63.2525. * only the work practice standards listed in Table 6 are applicable
63.2450(p)	Opening a safety device, as defined in 63.2550, is allowed at any time conditions require it to avoid unsafe conditions
63.2455	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for continuous process vents?
63.2455(a)	You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section. [Note: There are no emission limits and/or work practice standards in Table 1 that are applicable.
63.2455(b)	For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.
63.2470 – See Note below	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements

	must I meet for storage tanks?
63.2470(d)	Planned routine maintenance
63.2480	Emission Limitations, Work Practice Standards and Compliance Requirements – What requirements must I meet for equipment leaks?
63.2480(a)	You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section. [See Table 6 below for requirements.]
63.2480(b)	If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
63.2535	Other Requirements and Information – What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2535(k)	Compliance with 40 CFR, part 60, subpart VV and 40 CFR, part 61, subpart V
63.2540	Other Requirements and Information – What parts of the General Provisions apply to me?
Table 6	Requirements for Equipment Leaks

Note: requirements in Table 4 of 40 CFR, Part 63, Subpart FFFF are not applicable since the maximum true vapor pressure of the formaldehyde stored in this emissions unit is 5.3 kilopascals, which is less than the regulatory threshold of 6.9 kilopascals.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements under OAC rule 3745-21-09(DD), including the following sections:

OAC rule 3745-21-09(DD)(2)	Leak detection and repair program
OAC rule 3745-21-09(DD)(12)	Alternative monitoring schedule for valves based on a skip period
OAC rule 3745-21-09(DD)(13)	Alternative monitoring standard for valves based on the allowable percentage of valves leaking
OAC rule 3745-21-09(DD)(14)	Record keeping

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subpart VV, including the following sections:

60.486(a) through 60.486(k)	Identification of leaking components Maintain log of all leaking components. repair attempts and repair methods Maintain schematics, including piping and instrumentation diagrams Maintain lists of unsafe to monitor and difficult to monitor components Maintain monitoring schedule Maintain list of process unit shut downs that occur during monitoring periods

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart VV]

(3) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR, Part 63, Subpart FFFF, including the following sections:

63.2525	Notifications, Reports and Records – What records must I keep?
63.2525(a)	Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
63.2525(b)	Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.

63.2525(f)	A record of each time a safety device is opened to avoid unsafe conditions in accordance with 63.2450(s).
63.2525(j)	In the SSMP required by 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements under OAC rule 3745-21-09(DD), including the following section:

OAC rule 3745-21-09(DD)(15)	Reporting

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office as are required pursuant to 40 CFR Part 60, Subpart VV, per the following sections:

60.487(a) through 60.487(f)	Number of each type of component monitored each month Number of leaks for each type of component Number of components not repaired within the required time period Explanation for each delay of repair List of process unit shut downs

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart VV]

(3) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northwest District Office, as are required pursuant to 40 CFR, Part 63, Subpart FFFF, per the following sections:

63.2450(m)	Reporting
63.2515	Notifications, Reports and Records – What notifications must I submit and when?

63.2515(a)	You must submit all of the notifications in 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
63.2515(b)	Initial notification* * the company submitted the initial notification in 2004
63.2520	Notifications, Reports and Records – What reports must I submit and when?
63.2520(a)	You must submit each report in Table 11 to this subpart that applies to you.
63.2520(b)	Unless the Administrator has approved a different schedule for submission of reports under 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.
63.2520(d)	Notification of compliance status report
63.2520(e)	Compliance report
Table 11	Requirements for Reports

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart FFFF]

f) Testing Requirements

(1) The permittee shall comply with the applicable testing requirements under 40 CFR Part 60, Subpart VV, including the following sections:

60.485(a) through 60.485(h)	Reference methods for sample equipment used to detect component VOC leaks

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart VV]

g) Miscellaneous Requirements

(1) None.