Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

4/8/2010

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Michael Resar
PCS Nitrogen Ohio, L.P.
1900 Fort Amanda Road
P.O. Box 1901
Lima, OH 45802

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTA
Facility ID: 0302020370
Permit Number: P0105861
Permit Type: OAC Chapter 3745-31 Modification
County: Allen

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Lima News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

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-NWDO; Indiana

Permit Strategy Write-Up

1. Check all that apply:

   _X_ Synthetic Minor Determination

   ___ Netting Determination

2. Source Description:

   PCS Nitrogen Ohio, L.P. (PCS) is proposing to modify existing ammonia and urea production operations for purposes of increasing capacity at the facility located in Lima, Ohio (Allen County).

3. Facility Emissions and Attainment Status:

   PCS Nitrogen Ohio, L.P. is located in Allen County which is classified as attainment for all criteria pollutants. The PCS facility is a major source for Prevention of Significant Deterioration (PSD) purposes.

   The proposed project involves the physical modification of 5 emissions units. Additionally, there will be 18 emissions units which will not be physically modified but are considered "affected" sources because they will experience an increase in actual material throughput and an associated increase in actual emissions. PCS is requesting federally enforceable restrictions and limitations associated with the control of particulate matter to restrict the potential to emit for particulate emissions (PE), particulate matter 10 microns or less in size (PM10), and particulate matter 2.5 microns or less in size (PM2.5) emitted from the proposed modification. The modified and affected units will, in addition to emissions of particulate matter, also emit the following criteria pollutants: carbon monoxide (CO), nitrogen oxide (NOx), volatile organic compounds (VOC) and sulfur dioxide (SO2). The net emissions increase (based on actuals to projected actuals) for all criteria pollutants emitted from modified and affected units will be below PSD significant increase thresholds.

4. Source Emissions:

   PCS is requesting federally enforceable restrictions and limitations associated with applying scrubber control of PE, PM10, and PM2.5 generated by the urea prilling dryer/cyclone operations (emissions unit P524). This permit establishes mass emission limitations of 2.71 pounds PE per hour, 2.98 pounds PM10 per hour, and 2.44 pounds PM2.5 per hour. The federally enforceable pound per hour limitations are based on operational restrictions involving maximum outlet concentrations to be achieved by the scrubber.

   The federally enforceable requirements established in this permit will limit the potential to emit from the urea prilling dryer/cyclone operations to 11.87 tons PE per year, 13.05 tons PM10 per year, and 10.69 tons PM2.5 per year.

5. Conclusion:

   As a result of the federally enforceable limitations on the potential to emit for particulate matter from the urea prilling dryer/cyclone operations, the net emissions increase for PE, PM10, and PM2.5 from the proposed modification will not trigger PSD applicability.

6. Please provide additional notes or comments as necessary:

   None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year*
NOx	1855.20
OC	58.08
CO	49.06
VOC	45.77
PE	11.87
PM10	61.37
PM2.5	10.69

* It should be noted that these allowable emissions do not represent the net emissions increase for PSD applicability purposes.

Allen County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
PCS Nitrogen Ohio, L.P.

Issue Date: 4/8/2010
Permit Number: P0105861
Permit Type: OAC Chapter 3745-31 Modification
Permit Description: Modification to increase capacity of existing ammonia and urea production operations.
Facility ID: 0302020370
Facility Location: PCS Nitrogen Ohio, L.P.
Fort Amanda & Adgate Roads, None
Lima, OH 45804
Facility Description: Nitrogenous Fertilizer Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Donald Waltermeyer at Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road or (419)352-8461. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio | Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Permit-to-Install
for
PCS Nitrogen Ohio, L.P.

Facility ID: 0302020370
Permit Number: P0105861
Permit Type: OAC Chapter 3745-31 Modification
Issued: 4/8/2010
Effective: To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
PCS Nitrogen Ohio, L.P.

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Authorization

Facility ID: 0302020370
Facility Description: Nitrogenous Fertilizers
Application Number(s): A0038802
Permit Number: P0105861
Permit Description: Modification to increase capacity of existing ammonia and urea production operations.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $6,800.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 4/8/2010
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

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

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio 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 Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0105861
Permit Description: Modification to increase capacity of existing ammonia and urea production operations.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**B503**
Company Equipment ID:	Ammonia Production Unit: Primary Reformer
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B507**
Company Equipment ID:	Ammonia Load Heater
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P520**
Company Equipment ID:	Ammonia Production Unit Reforming Section
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P524**
Company Equipment ID:	Urea Prilling Dryer Cyclone
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

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.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) 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.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. 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 re-issuance, or modification.

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, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying 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.

4. 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, 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.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written 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. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

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

c) 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 ORC section 3704.08.

(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.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

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

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. 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.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit 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) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be <u>obtained before</u> the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. 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.

B. Facility-Wide Terms and Conditions

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

   a) None

C. Emissions Unit Terms and Conditions

1. B503, Ammonia Production Unit: Primary Reformer

Operations, Property and/or Equipment Description:

Ammonia Production Unit – 1300 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 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 rule 3704.03(T)	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; 0.0089 lb of particulate matter 10 microns or less in size (PM_{10})/mmBtu 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 potentials 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 PM10 emission limitation established pursuant to ORC 3704.03(T). All emissions of particulate matter from this emission unit are PM10.

d. Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size (PM2.5) are being implemented through the PM10 Surrogate Policy issued by EPA in 1997. For purposes of demonstrating that PM10 is a reasonable surrogate for PM2.5, all emissions of PM10 will be considered PM2.5.

c) Operational Restrictions

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

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.

(2) The permittee shall maintain the following records for emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, 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, 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.

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.

(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 60 days after the end of such year.

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 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).

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)/$mmft^3$, and then dividing by the maximum heat input capacity of the reformer (1300 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).

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.

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) for this emissions unit. The PTE is based on the results of 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.

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) for this emissions unit. 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.

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) for this emissions unit. 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.

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) for this emissions unit. The PTE is based on the results of a worst-case stack test conducted on 12/14/01.

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.

h. Emission Limitation
0.0089 lb of PM10/mmBtu

Applicable Compliance Method
The hourly limitation represents the potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for this emissions unit. The potential to emit is based on a heat content of 851 Btu/scf and a PM10 emission factor of 1.90 lbs/mmft^3 (AP-42 Table 1.4-2 [7/98]).

If required, compliance with the allowable emission limitations shall be determined in accordance with Methods 201/201A and 202 of 40 CFR Part 51, Appendix M Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).

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.

2. 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) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	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 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
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 potentials 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.

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.

(2) The permittee shall maintain the following records for emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, 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, 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.

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.

(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 60 days after the end of such year.

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. <u>Emission Limitation</u>
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).

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 gas consumption rate (0.0392 $mmft^3$/hr) by an AP-42 emission factor of 1.90 lbs of PE (filterable)/mmft3 (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 limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

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) for this emissions unit. The PTE is based on a heat content of 1020 Btu/scf and a NOx emission factor of 60 lbs/$mmft^3$ (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.

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) for this emissions unit. The PTE is based on a heat content of 1020 Btu/scf and a CO emission factor of 84 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 10 of 40 CFR, Part 60, Appendix A.

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.

3. 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.

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	8.76 tons of fugitive volatile organic compounds (VOC)/year; 1.16 lbs of carbon monoxide (CO)/hour; 5.08 tons of CO/year
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 represent the potentials 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, 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, 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.

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 60 days after the end of such year.

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. <u>Emission Limitation</u>
8.76 tons of fugitive VOC/year

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 8760 hours per year and dividing by 2000 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.

b. Emission Limitations
1.16 lbs of CO)/hour; 5.08 tons of CO/year

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). The PTE is based on previous stack testing. The annual limitation was developed by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 lbs. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation will be assumed.

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

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.

4. 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 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)	2.71 lbs of particulate emissions (PE)/hour; 11.87 tons PE/year; 2.98 lbs of particulate matter 10 microns or less in size (PM10)/hour; 13.05 tons PM10/year; 2.44 lbs of particulate matter 2.5 microns or less in size (PM2.5)/hour; 10.69 tons PM2.5/year; Visible PE shall not exceed 10% opacity, as a six-minute average. See b)(2)a. and c)(1)
b.	ORC 3704.03(T)	See b)(2)b.
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 64 - Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7), and e)(3)
f.	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	See b)(2)f., d)(8), and e)(4)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	of a miscellaneous organic chemical manufacturing process unit at an existing chemical manufacturing facility subject to the emission limitations/control measures specified in this section.	
g.	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. This permit establishes 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 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	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 0.01 grains per dry standard cubic foot (gr/dscf) of exhaust gas for PE;

b. a maximum outlet concentration of 0.011 gr/dscf of exhaust gas for PM10; and

c. a maximum outlet concentration of 0.009 gr/dscf of exhaust gas for PM2.5.

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.

(2) 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)c. and c)(1)d. 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.

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 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.

(2) 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) 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 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.

(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 scrubber. 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.

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

(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.

(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.

(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.

(8) 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.

(9) The permittee shall maintain the following records for emissions units B503, B506, B507, B508, P520, P521, P522, P523, P524, 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, 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.

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) and c)(2) 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.

(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.

(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 “a” or “b” above where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b” where prompt corrective action that would bring the 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 “a” or “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.

(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

(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)(11)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 60 days after the end of such year.

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. <u>Emission Limitation</u>
Visible PE shall not exceed 10% opacity, as a six-minute average.

<u>Applicable Compliance Method</u>
If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. <u>Emission Limitations</u>
0.01 gr/dscf for PE;

2.71 lbs PE/hour;

11.87 tons of PE/year.

<u>Applicable Compliance Method</u>
Compliance with the gr/dscf and the hourly emission limitations shall be determined in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-5 [see Testing Requirements in f)(2)].

The annual limitation was developed by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 lbs. Therefore, as long as compliance

with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation will be assumed

c. Emission Limitations
0.011 gr/dscf for PM10:

2.98 lbs of PM10/hour;

13.05 tons of PM10/year

Applicable Compliance Method
Compliance with the gr/dscf and hourly limitations shall be determined in accordance with the test methods and procedures of Methods 201/201A and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office [see Testing Requirements in f)(2)].

The annual limitation was developed by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 lbs. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation will be assumed.

d. Emission Limitations
0.009 gr/dscf for PM2.5;

2.44 lbs PM2.5/hour;

10.69 tons of PM2.5/year

Applicable Compliance Method
Compliance with the gr/dscf and hourly limitations shall be determined in accordance with the test methods and procedures of Methods 201/201A and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office [see Testing Requirements in f)(2)].

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

a. The emission testing shall be conducted within 180 days* after initial startup following modification of the emissions unit. Testing time frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Northwest District Office.

*It should be noted that the test methods specified in f)(2)c. for PM10 and PM2.5 are only proposed as of the issuance date of this permit. If the test methods for PM10 and PM2.5 have not been finalized by the date the permittee engages in initial startup (following modification) of this emissions unit, testing shall be conducted with 180 days after final approval of the test methods in the Federal Register.

b. The emission testing shall be conducted to demonstrate compliance with the following requirements for the scrubber control system:

i. a maximum outlet concentration of 0.01 gr/dscf for PE;

ii. a mass emission rate of 2.75 lbs PE/hour;

iii. a maximum outlet concentration of 0.011 gr/dscf for PM10;

iv. a mass emission rate of 2.82 lbs PM10/hour;

v. a maximum outlet concentration of 0.009 gr/dscf for PM2.5;

vi. a mass emission rate of 2.35 lbs PM2.5/hour.

c. The following test method(s) shall be employed to meet the testing requirements above:

PE - Methods 1-5 of 40 CFR Part 60, Appendix A;

PM10 - Methods 201/201A and 202 of 40 CFR Part 51, Appendix M;

PM2.5 - Methods 201/201A and 202 of 40 CFR Part 51, Appendix M;

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

d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the Northwest District Office. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the 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 Northwest District Office's refusal to accept the results of the emission test(s).

f. Personnel from the 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.

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

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)(11) and e)(5) of this permit.