

**AIR EMISSION SUMMARY**

The air contaminant emissions unit(s) listed below comprise the Permit to Install for BP Chemicals, Inc./PCS Nitrogen located in Allen County. The emissions unit(s) listed below shall not exceed the emission limits/control requirements contained in the table below. This condition in no way limits applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<b>Ohio EPA Emissions unit <u>Number</u></b>	<b>Emissions unit Identification <u>Description</u></b>	<b>BAT <u>Determination</u></b>	<b>Applicable Federal and OAC <u>Rules</u></b>	<b>Permit Allowable Mass Emissions or Control &amp; Usage <u>Requirements</u></b>
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B001 (Modification)	Natural Gas Fired Boiler #1 (227 MMBtu/hr). Modification involves voluntary restrictions on annual emissions and fuel usage for PSD netting purposes.	Not Applicable	3745-31-02 (A) (2)	Use of Only Natural Gas as Fuel
				1.69 lbs PE/hr*; 7.40 tons PE/yr*; Combined Limit with B002 of 8.88 tons PE/yr*
				0.13 lb SO <sub>2</sub> /hr; 0.57 ton SO <sub>2</sub> /yr; Combined Limit with B002 of 0.70 ton SO <sub>2</sub> /yr
				50.00 lbs NO <sub>x</sub> /hr; 219.0 tons NO <sub>x</sub> /yr; Combined Limit with B002 of 262.90 tons NO <sub>x</sub> /yr
				28.00 lbs CO/hr; 122.64 tons CO/yr; Combined Limit with B002 of 147.22 tons CO/yr
				1.22 lbs VOC/hr; 5.34 tons VOC/yr Combined Limit with B002 of 6.43 tons VOC/yr
			3745-17-10 (B) (1)	2.44 lbs OC/hr****; 10.69 tons OC/yr Combined Limit with B002 of 12.85 tons OC/yr
				(See AST&C's)

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3745-17-07 (A) 20% Opacity as a  
six minute  
average

3745-18-08 (D) (1) \*\*

B002 (Modification)	Natural Gas Fired Boiler #2 (227 MMBtu/hr). Modification involves voluntary restrictions on annual emissions & fuel usage for PSD netting purposes.	Not Applicable	3745-31-02 (A) (2)	Use of Only Natural Gas as Fuel
				1.69 lbs PE/hr*; 7.40 tons PE/yr*; Combined Limit with B001 of 8.88 tons PE/yr*
				0.13 lb SO <sub>2</sub> /hr; 0.57 ton SO <sub>2</sub> /yr; Combined Limit with B001 of 0.70 ton SO <sub>2</sub> /yr
				50.00 lbs NO <sub>x</sub> /hr; 219.0 tons NO <sub>x</sub> /yr; Combined Limit with B001 of 262.90 tons NO <sub>x</sub> /yr
				28.00 lbs CO/hr; 122.64 tons CO/yr; Combined Limit with B001 of 147.22 tons CO/yr
				1.22 lbs VOC/hr; 5.34 tons VOC/yr Combined Limit with B001 of 6.43 tons VOC/yr
				2.44 lbs OC/hr****; 10.69 tons OC/yr Combined Limit with B002 of 12.85 tons OC/yr
				(See AST&C's)

			3745-17-10 (B) (1)	**
			3745-17-07 (A)	20% Opacity as a six minute average
			3745-18-08 (D) (1)	**
B003 (Modification)	Ammonia Production Unit: Primary Reformer (1000 MMBtu/hr). Modification involves voluntary restrictions on fuel type usage for PSD netting purposes.	Not Applicable	3745-31-02 (A) (2)	Use of Only Natural Gas & Process Purge Gas as Fuels  12.60 lbs PE/hr*; 55.19 tons PE/yr*  0.42 lb SO <sub>2</sub> /hr; 1.84 tons SO <sub>2</sub> /yr  265.0 lbs NO <sub>x</sub> /hr; 1160.70 tons NO <sub>x</sub> /yr  80.00 lbs CO/hr; 350.40 tons CO/yr  1.07 lbs VOC/hr; 4.69 tons VOC/yr  (See AST&C's)
			3745-17-10 (B) (1)	**
			3745-17-07 (A)	**
			3745-18-08 (D) (2)	20% Opacity as a six minute average  **

B008 (Modification)	Ammonia Production Unit: Natural Gas Feed Heater (3 MMBtu/hr). Modification involves voluntary restrictions on annual emissions & fuel usage for PSD netting purposes.	Not Applicable	3745-31-02 (A) (2)	0.02 lb PE/hr*; 0.05 ton PE/yr*  0.002 lb SO2/hr; 0.004 ton SO2/yr  0.30 lb NOx/hr; 0.66 ton NOx/yr  0.25 lb CO/hr; 0.55 ton CO/yr  0.02 lb VOC/hr; 0.04 ton VOC/yr  0.03 lb OC/hr****; 0.07 ton OC/yr
			3745-17-10 (B) (1)	**
			3745-17-07 (A)	20% Opacity as a six-minute average  (See AST&C's)
P020 (Modification)	Ammonia Production Unit: Reforming Section. Modification involves increasing max. production capacity of tons NH <sub>3</sub> /day	Use of Open Flare; Compliance with the Permit Allowable Mass Emissions; and the Additional Special Terms and Conditions of this Permit	40 CFR Part 52 3745-31-05 3745-31-10 through 3745-31-20	1.90 lbs CO/hr; 8.32 tons CO/yr 0.40 lbs NH <sub>3</sub> /hr; 1.75 tons NH <sub>3</sub> /yr  Visible emission restrictions  (See AST&C's)

P021 (Modification)	Ammonia Production Unit: Purification Section. Modification involves increasing max. production capacity of tons NH <sub>3</sub> /day	Use of Open Flare; Compliance with the Permit Allowable Mass Emissions; and the Additional Special Terms and Conditions of this Permit	40 CFR Part 52 3745-31-05 3745-31-10 through 3745-31-20	0.002 lb CO/hr; 0.009 ton CO/yr 0.002 lbs NH <sub>3</sub> /hr; 0.009 tons NH <sub>3</sub> /yr 0.002 lb VOC/hr; 0.009 ton VOC/yr  From Process Fugitive Emissions: 3.42 tons VOC/yr  Visible emissions restrictions
(See AST&C's)				
P022 (Modification)	Ammonia Production Unit: Synthesis Section. Modification involves increasing max. production capacity of tons NH <sub>3</sub> /day	Use of Open Flare; Compliance with the Permit Allowable Mass Emissions; and the Additional Special Terms and Conditions of this Permit	40 CFR Part 52 3745-31-05 3745-31-10 through 3745-31-20	0.05 lb CO/hr; 0.22 ton CO/yr 0.06 lbs NH <sub>3</sub> /hr; 0.26 ton NH <sub>3</sub> /yr  Process Fugitive Emissions: 47.39 tons NH <sub>3</sub> /yr  Visible emissions restrictions
(See AST&C's)				
P023 (Modification)	Ammonia Production Unit: CO <sub>2</sub> Stripper, Process Condensate Stripper, and Ancillary Equipment. Modification involves increasing max. production capacity of tons NH <sub>3</sub> /day	Compliance with the Permit Allowable Mass Emissions; and the Additional Special Terms and Conditions of this Permit	40 CFR Part 52 3745-31-05 3745-31-10 through 3745-31-20	151.0 lbs VOC/hr 175.0 tons VOC/yr  200.0 lbs NH <sub>3</sub> /hr 876.0 tons NH <sub>3</sub> /yr  (See AST&C's)





- \*\* Applicable requirements established by this OAC rule are less stringent than the limitations requested by the permittee in accordance with OAC rule 3745-31-02(A)(2) or requirements established by OAC rule 3745-31-05.
- \*\*\* The facility implemented LDAR program plan defines and complies with all the requirements of 40 CFR Part 60 - Subpart VV, and OAC rule 3745-21-09(DD).
- \*\*\*\* OC emissions include VOC's.

SUMMARY  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate Emissions (PE)	186.77
Sulfur Dioxide (SO <sub>2</sub> )	2.54
Nitrogen Oxides (NO <sub>x</sub> )	1424.26
Carbon Monoxide (CO)	506.72
Volatile Organic Compounds (VOC)	196.03
Organic Compounds (OC)	12.92
Ammonia (NH <sub>3</sub> )	1070.38

The allowable emissions stated in the table above do not involve any increases in allowable emissions at the facility.

## **ADDITIONAL SPECIAL TERMS AND CONDITIONS**

### **Introduction**

This Permit to Install (PTI) allows for the installation of a new urea granulation plant and a modification to debottleneck the existing ammonia production process. The proposed facility changes will result in "actual" emission increases of particulate emissions (PE), sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), and carbon monoxide (CO). "Actual" emission decreases will be experienced for ammonia (NH<sub>3</sub>) and volatile organic compounds (VOC), consisting mostly of methanol. It should be noted that despite "actual" emission increases, no "allowable" emission rate increases were experienced by any pollutant as a result of this permit action.

The new urea granulation plant will have a maximum capacity of 800 tons per day to supplement the facility's current 700 tons per day urea granulation plant. The new granulation plant will emit PE, VOC, and NH<sub>3</sub> which will be controlled by 3 process scrubbers. The addition of the new urea plant will increase the throughput for the current warehouse used to store granular urea product. The increased warehouse throughput is addressed in this permit under emissions unit P904.

The modification of the ammonia process will increase production capacity from 1750 to 2100 tons/day. This PTI addresses physically modifications to ammonia production emission units; P020-Reforming Section, P021-Purification Section, P022-Synthesis Section, and P023-CO<sub>2</sub> & Condensate Strippers. This PTI also addresses voluntary restrictions requested by the permittee (for PSD purposes) on annual emissions, fuel usage, and fuel type for the following "existing" emissions units; B001 & B002-Natural Gas Fired Boilers #1 & #2, B003-Primary Reformer, and B008-Natural Gas Feed Heater.

### **A. Applicable Emission Limitations and/or Control Requirements**

1. The maximum natural gas fuel usage for emissions units B001 & B002 combined shall not exceed 2337 MMCF per year based upon a rolling, 12-month summation of the monthly fuel usage rates. Emissions units B001 and B002 are existing emissions units and as such have existing natural gas usage records in lieu of establishing monthly natural gas usage restrictions for the first year.

2. The maximum natural gas fuel usage for emissions units B008 shall not exceed 13.14 MMCF per year based upon a rolling, 12-month summation of the monthly fuel usage rates. Emissions unit B008 is an existing emissions unit and as such have existing natural gas usage records in lieu of establishing monthly natural gas usage restrictions the first year.
  
3. VOC emissions from Ammonia Production Unit: CO2 Stripper, Process Condensate Stripper, and Ancillary Equipment, emissions unit P023 shall be limited to 175.0 ton per year, based upon a rolling, 365-day summation of the daily VOC emission rates. To ensure federally enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the monthly VOC emission rates specified in the following table:

<u>Month(s)</u>	<u>Maximum Cumulative Emissions of VOC (Tons)</u>
1	100.0
1-2	107.0
1-3	114.0
1-4	121.0
1-5	128.0
1-6	135.0
1-7	142.0
1-8	149.0
1-9	156.0
1-10	163.0
1-11	170.0
1-12	175.0

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emissions limitation of 175.0 tons shall be based upon a rolling, 365-day summation of the daily VOC emission rates.

4. The following limitations for emissions unit P902 involve combined emissions from two separate process stacks, the granulator evaporator stack and the granulator scrubber stack (company stack identification EP-651 & EP-652, respectively):

12.0 lbs PE/hr  
 52.56 tons PE/yr  
 0.51 lbs VOC/hr  
 2.23 tons VOC/yr  
 18.2 lbs NH<sub>3</sub>/hr  
 79.72 tons NH<sub>3</sub>/yr

5. Granular Urea Warehouse System, emissions unit P904, shall employ the following controls for limiting fugitive particulate emissions:
  - a. The warehouse building emissions shall be vented to a baghouse.
  - b. All conveying operations not contained within the warehouse building shall be enclosed.
  - c. All bulk truck and railcar loading operations shall use rubber chutes.
6. The permittee shall operate the open flares controlling emission units P020, P021 & P022 such that they comply with the following requirements:
  - a. Each flare shall be designed for and operated with no visible emissions as determined by Method 22 observations, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
  - b. Each flare shall be operated with a flame at all times when the emission unit is in operation.
  - c. The net heating value of the stack gases being combusted in the flare shall be 200 Btu/SCF or greater.
  - d. Each flare shall be designed for and operated with an exit velocity less than 60 ft/sec.
7. The permittee shall include the appropriate process equipment and regulated components for emission units P902 and P903 in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (includes operational restrictions, monitoring and recordkeeping, reporting, and testing) of Ohio Administrative Code (OAC) Rule 3745-21-09( DD) Leaks from process units that produce organic chemicals, and 40 CFR 60 Subpart VV ( Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry).

**B. Operational Restrictions**

1. The permittee shall burn only natural gas in emissions units

B001, B002, and B008.

2. The permittee shall burn only natural gas and process purge gas in emissions unit B003. The purge gas shall meet the following specifications:
  - a. 200 Btu/SCF or greater
  - b. 0% sulfur content
3. Urea granulation plants #1 & #2, emission units P902 & P903, respectively, shall each be controlled by the use of three process scrubbers (evaporator scrubber, granulator scrubber, & combination scrubber). A range of operating values for pressure drop, water flow rate, and scrubbing liquid density shall be established during emission testing required by Section E.2.

The permittee shall maintain, the pressure drops, water flow rates, and scrubbing liquid density operating range values within the established ranges at all times while the emission units are in operation.
4. The pressure drop across the baghouse controlling particulate emissions from the granular urea warehouse building (emission unit P904) shall be maintained within the range of -4 to -12 inches of water while the emissions unit is in operation.

**C. Monitoring and/or Recordkeeping Requirements**

1. In order to demonstrate compliance with the fuel usage restriction of 2237 MMCF/yr of natural gas for emissions units B001 & B002 combined, the permittee shall collect and record the following information each month:
  - a. The total natural gas usage in MMCF for B001.
  - b. The total natural gas usage in MMCF for B002.
  - c. The total combined natural gas usage for emission units B001 & B002 (summation of term C.1.a. + C.1.b.).
  - d. The rolling, 12-month summation of the total combined natural gas usage for emission units B001 & B002.
2. In order to demonstrate compliance with the fuel usage restriction of 13.14 MMCF/yr of natural gas for emissions units B008, the permittee shall collect and record the following information each month:

- a. The total natural gas usage in MMCF.
  - b. The rolling, 12-month summation of the natural gas usage.
3. For the purposes of demonstrating that the permittee will comply with the visible emission restriction of 20% opacity as a six-minute by only burning the inherently clean fuel of natural gas in emissions units B001, B002, and B008 as required by Section B.1. and only burning the inherently clean fuels of natural gas and process purge gas in emissions unit B003 as required by Section B.2., the permittee shall perform the following recordkeeping:
- a. 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 emission units B001, B002, and B008.
  - b. For each day during which the permittee burns fuels other than natural gas and process purge gas, the permittee shall maintain a record of the type and quantity of fuel burned in emissions unit B003.

The burning of fuels other than those specified in Sections B.1. and B.2. may be deemed "modifications" to facility emission units and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI #03-9943 and the operating permit.

4. The permittee shall perform the following monitoring and recordkeeping for the flares controlling emissions units P020, P021, & P022:
- a. The permittee shall properly install, operate, and maintain a thermocouple or any other equivalent device to detect the presence of a pilot flame when the emission units are in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with good engineering practice.
  - b. The permittee shall maintain records of all hourly periods when the flare pilot flame is absent.
  - c. The permittee shall maintain daily records of the operating times for the flare, monitoring equipment, and the associated emission units.
  - d. The permittee shall keep an up-to-date, readily accessible

record of the following information:

- i. all visible emission readings
  - ii. heat content determinations
  - iii. exit velocity determinations
5. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record air flow (in actual ft<sup>3</sup>) from the stack for emissions unit P023. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with good engineering practice.
6. In order to demonstrate compliance with the allowable VOC emissions limitation of 175.0 tons per year for emissions unit P023, the permittee shall collect and record the following information each day:
- a. the total air flow from the exhaust gas stack in actual ft<sup>3</sup>/day.
  - b. the calculated VOC emissions using the following equation:  
$$(\text{emission factor in lbs VOC/dscf}) \times (\text{dscf/day}) \times (\text{ton}/2000 \text{ lbs}) = \text{tons VOC/day}$$

The (lbs VOC/dscf) emission factor shall be determined by the most recent emission test performed in accordance with the testing required by Section E.2.d.

The (dscf/day) shall be determined by the following equations:

$$\text{dscf/day} = \frac{\text{actual ft}^3}{\text{day}} \times (1-\text{BWS}) \times \frac{\text{TSD}}{(\text{TS}) \text{ avg.}} \times \frac{\text{PS}}{\text{PSTD}}$$

where: BWS = stack gas moisture content

TSD = temperature standard (528°R)

TS = temperature of stack (°R)

PS = stack static pressure ± PBar (in Hg)  
PBar = barometric pressure

PSTD = pressure standard (29.92 in Hg)

BWS, TS, & PS shall be determined by the most recent emission test performed in accordance with the testing required by Section E.2.d.

- c. Beginning the first month after the first 12 calendar months of operation following the issuance of this permit, the rolling, 365-day summation of VOC emissions.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative monthly VOC emissions.

- 7. The permittee shall properly install, operate and maintain equipment to continuously monitor the following parameters for each scrubber controlling emissions units P902 & P903:
  - a. static pressure drop across the scrubber.
  - b. scrubber water flow rate.
  - c. scrubbing liquid density.

The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with good engineering practice.

- 8. The permittee shall collect and record the following information each day for each scrubber controlling emission units P902 & P903:
  - a. The pressure drop across the scrubber, in inches of water, on a once per shift basis.
  - b. The scrubber water flow rate, in gallons per minute, on a once per shift basis.
  - c. The scrubbing liquid density, in specific gravity units, on a once per shift basis.
  - d. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

- 9. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse for emissions unit P904 while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated,

and maintained in accordance with good engineering practice. The permittee shall record the pressure drop across the baghouse on daily basis.

10. In order to demonstrate compliance with the process purge gas restrictions contained in section B.2, permittee shall collect and record the following information for the process purge gas each month:
  - a. sulfur content in wt%
  - b. Btu content in Btu/SCF
  
11. The permittee shall collect and maintain the following information each month:
  - a. The granular urea production, in tons, from urea granulation plant #1, emissions unit P902.
  - b. The granular urea production, in tons, from urea granulation plant #2, emissions unit P903.
  - c. The annual, year to date granular urea production at the facility (summation of terms C.11.a & C.11.b for each calendar month to date from January to December)
  
12. The permittee shall collect and maintain records of the annual hours of operation for P021 & P022.
  
13. 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 unless otherwise specified in this permit and/or required by either state or federal applicable regulations. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed, for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

#### **D. Reporting Requirements**

1. 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:
  - a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

- b. Quarterly written reports of (i) any deviations from 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 promptly made to the appropriate Ohio EPA District Office or local air agency.

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

- c. Written reports, which identify any deviations from the monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months.

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.

- d. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. The permittee shall submit annual deviation (excursion) reports which identify all exceedances of the following:

- a. The rolling, 12-month combined natural gas usage rate limitation for emission units B001 & B002 combined.
- b. The rolling, 12-month natural gas usage rate limitation for emissions units B008.

These reports shall include the corrective actions that were taken to achieve compliance and shall be submitted by January 31 of each year.

If no deviations occurred during the year, the permittee shall

submit an annual report, which states that no deviations occurred. The report shall be submitted by January 31 of each year.

3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the following:
  - a. All periods of time during which the pilot flame on the flares controlling emission units P020, P021, & P022 is not functioning properly.
  - b. The rolling, 365-day VOC emission limitation for emissions unit P023 and for the first 12 calendar months of operations following the issuance of this permit, all exceedances of the maximum allowable cumulative VOC emission limitations.
  - c. All periods of time during which the following scrubber parameters were not maintained at or above the required levels for emission units P902 & P903:
    - i. The static pressure drop across the scrubber.
    - ii. The scrubber water flow rate.
    - iii. The scrubbing liquid density.
  - d. All periods of time during which the pressure drop across the baghouse for emissions unit P904 did not comply with the allowable range specified in section B.4.
  - e. The permittee shall immediately notify the appropriate Ohio EPA District Office or local air agency when fuels other than those specified Sections B.1. and B.2. are burned in emissions unit B001, B002, B003, and B008.

The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in emission units B001, B002, and B008.

The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and process purge gas was burned in emissions unit B003.

Any record showing that the process purge gas burned in emissions unit B003 does not meet the restriction specified in section B.2.

Each report shall be submitted within 30 days after the deviation occurs.

4. The compliance status of the emissions units B001, B002, B003, B008, P020, P021, P022, P023, P902, P903, and P904 shall be reported pursuant to the annual certification required by OAC rule 3745-77-07(C) (5).
5. The actual annual emissions data for emissions units B001, B002, B003, B008, P020, P021, P022, P023, P902, P903, and P904 shall be reported pursuant to the fee emissions report required by OAC rule 3745-78-02(A).
6. The permittee shall submit to the Ohio EPA within 180 days prior to start-up of operations under this permit, a Preventive Maintenance Malfunction Abatement Plan (PMMAP) for emission units P020, P021, and P022. The PMMAP shall include a description of steps or procedures reasonably available to be taken in order to prevent or minimize emissions during start-up and shutdown operations.

**E. Testing Requirements**

1. Compliance Methods Requirements:

Compliance with the emission limitations listed in the Air Emission Summary of this PTI shall be determined in accordance with the following method:

- a. Emission Limitations (short-term) for emissions unit B001:

1.69 lbs PE/hr  
 0.13 lb SO<sub>2</sub>/hr  
 50.00 lbs NO<sub>x</sub>/hr  
 28.00 lbs CO/hr  
 1.22 lbs VOC/hr  
 2.44 lbs OC/hr

Applicable Compliance Method:

The emission limitations for PE, SO<sub>2</sub>, and VOC were established by multiplying the following emission factors based on AP-42, Section 1.4, for natural gas

7.6 lbs PM/MMCF  
 0.6 lb SO<sub>2</sub>/MMCF  
 5.5 lbs VOC/MMCF  
 11.0 lbs OC/MMCF

by the maximum hourly gas burning capacity (0.222 MMCF/hr)

of the emissions unit. The hourly emission limitations are based on the emission unit's potential to emit. Therefore, no hourly recordkeeping or deviation reporting is required to demonstrate compliance with these limits.

Compliance for NO<sub>x</sub> and CO shall be determined by emission testing as specified in section E.2.c.

b. Emission Limitations (short-term) for emissions unit B002:

1.69 lbs PE/hr  
0.13 lb SO<sub>2</sub>/hr  
50.00 lbs NO<sub>x</sub>/hr  
28.00 lbs CO/hr  
1.22 lbs VOC/hr  
2.44 lbs OC/hr

Applicable Compliance Method:

The emission limitations for PE, SO<sub>2</sub>, and VOC were established by multiplying the following emission factors based on AP-42, Section 1.4, for natural gas

7.6 lbs PM/MMCF  
0.6 lb SO<sub>2</sub>/MMCF  
5.5 lbs VOC/MMCF  
11.0 lbs OC/MMCF

by the maximum hourly gas burning capacity (0.222 MMCF/hr) of the emissions unit. The hourly emission limitations are based on the emission unit's potential to emit. Therefore, no hourly recordkeeping or deviation reporting is required to demonstrate compliance with these limits.

Compliance for NO<sub>x</sub> and CO shall be determined by emission testing as specified in section E.2.c.

c. Emission Limitation (long-term) for emissions units B001 & B002 combined:

8.88 tons PE/yr  
0.70 ton SO<sub>2</sub>/yr  
262.90 tons NO<sub>x</sub>/yr  
147.22 tons CO/yr  
6.43 tons VOC/yr  
12.85 tons OC/yr

Applicable Compliance Method:

Compliance for PE, SO<sub>2</sub>, and VOC shall be determined by multiplying the following emission factors based on AP-42, Section 1.4, for natural gas

7.6 lbs PM/MMCF  
0.6 lb SO<sub>2</sub>/MMCF  
5.5 lbs VOC/MMCF  
11.0 lbs OC/MMCF

by the maximum natural gas usage restriction of 2337 MMCF/yr as specified in Section A.1., and dividing by 2000 lbs/ton. Therefore, as long as compliance is demonstrated with the annual natural gas usage restriction through the recordkeeping specified in Section C.1 above, compliance will also be shown with the annual limitation.

Compliance for NO<sub>x</sub> & CO shall be determined by multiplying the emissions factors of 225 lbs NO<sub>x</sub>/MMCF & 126 lbs CO/MMCF developed from previous stack test results by the maximum natural gas usage restriction of 2337 MMCF/yr as specified in Section A.1., and dividing by 2000 lbs/ton. Therefore, as long as compliance is demonstrated with the annual natural gas usage restriction through the recordkeeping specified in Section C.1 above, compliance will also be shown with the annual limitation.

d. Emission Limitations (short-term) for emissions unit B003:

12.60 lbs PE/hr  
0.42 lb SO<sub>2</sub>/hr  
265.0 lbs NO<sub>x</sub>/hr  
80.00 lbs CO/hr  
1.07 lb VOC/hr

Applicable Compliance Method:

The emission limitations for PE, SO<sub>2</sub>, and VOC were established by multiplying the following National Emission Data System (NEDS) emission factors for SCC code 3-01-003-07

0.144 lb PM/ton NH<sub>3</sub> produced  
0.0048 lb SO<sub>2</sub>/ton NH<sub>3</sub> produced  
0.0122 lb OC/ton NH<sub>3</sub>/produced

by the maximum hourly production capacity (87.5 tons NH<sub>3</sub>/hr) of the emissions unit.

The hourly emission limitations for PE, SO<sub>2</sub>, and VOC are

based on the emission unit's potential to emit. Therefore, no hourly recordkeeping or deviation reporting is required to demonstrate compliance with these limits.

Compliance for NO<sub>x</sub> and CO shall be determined by emission testing as specified in section E.2.c.

e. Emission Limitations (long-term) for emissions unit B003:

55.19 tons PE/yr  
1.84 tons SO<sub>2</sub>/yr  
1160.70 tons NO<sub>x</sub>/yr  
350.40 tons CO/yr  
4.69 tons VOC/yr

Applicable Compliance Method:

The TPY limitations were developed by multiplying the lb/hr allowable mass emission rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

f. Emission Limitations (short-term) for emissions unit B008:

0.02 lb PE/hr  
0.002 lb SO<sub>2</sub>/hr  
0.30 lbs NO<sub>x</sub>/hr  
0.25 lb CO/hr  
0.02 lb VOC/hr  
0.03 lb OC/hr

Applicable Compliance Method:

These emission limitations were established by multiplying the following emission factors based on AP-42, Section 1.4, for natural gas

7.6 lbs PM/MMCF  
0.6 lb SO<sub>2</sub>/MMCF  
100 lbs NO<sub>x</sub>/MMCF  
84 lbs CO/MMCF  
5.5 lbs VOC/MMCF  
11.0 lbs OC/MMCF

by the maximum hourly gas burning capacity (0.003 MMCF/hr) of the emissions unit. The hourly emission limitations are

based on the emission unit's potential to emit. Therefore, no hourly recordkeeping or deviation reporting is required to demonstrate compliance with these limits.

g. Emission Limitation (long-term) for emissions unit B008:

0.05 tons PE/yr  
0.004 ton SO<sub>2</sub>/yr  
0.66 ton NO<sub>x</sub>/yr  
0.55 ton CO/yr  
0.04 ton VOC/yr  
0.07 ton OC/yr

Applicable Compliance Method:

Compliance shall be determined by multiplying the following emission factors based on AP-42, Section 1.4, for natural gas

7.6 lbs PM/MMCF  
0.6 lb SO<sub>2</sub>/MMCF  
100 lbs NO<sub>x</sub>/MMCF  
84 lbs CO/MMCF  
5.5 lbs VOC/MMCF  
11.0 lbs OC/MMCF

by the maximum natural gas usage restriction of 13.14 MMCF/yr as specified in Section A.2., and dividing by 2000 lbs/ton. Therefore, as long as compliance is demonstrated with the annual natural gas usage restriction through the recordkeeping specified in Section C.3 above, compliance will also be shown with the annual limitation.

h. Emission Limitation:

20% opacity as a six minute average from emissions units: B001, B002, B003, & B008.

Applicable Compliance Method:

Compliance with the visible emission limitations shall be determined in accordance with the test method and procedures in OAC rule 3745-17-03(B) (1).

i. Emission Limitations (short-term) for emission unit P020:

1.90 lbs CO/hr  
0.40 lbs NH<sub>3</sub>/hr

Applicable Compliance Method:

Emission limitations (short-term) were developed by applying a 95% reduction efficiency for control with an open flare to historical inlet stack testing results. Compliance shall be demonstrated by the monitoring and recordkeeping specified in section C.4.

j. Emission Limitations (long-term) for emission unit P020:

8.32 tons CO/yr  
1.75 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

k. Emission Limitations for Emissions Unit P021:

i. Short-term Limitations:

0.002 lbs CO/hr  
0.002 lbs NH<sub>3</sub>/hr  
0.002 lbs VOC/hr

Applicable Compliance Method:

Emission limitations (short-term) were developed by applying a 95% reduction efficiency for control with an open flare to historical inlet stack testing results. Compliance shall be demonstrated by the monitoring and recordkeeping specified in section C.4.

ii. Long Term Limitations

0.009 tons CO/yr  
0.009 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitations were developed by multiplying

the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

- iii. Process Fugitive Emissions shall not exceed 3.42 tons VOC/yr

Applicable Compliance Method:

The process fugitive emission limitation was developed in accordance with the following equation:

$$PFE = (\sum_{i=1}^n N_i S_i) \times (\text{hrs/yr}) \times (\text{ton}/2000 \text{ lbs})$$

where:

PFE = Process fugitive VOC emissions,  
tons/yr

$N_i$  = Number of pipe fitting components  $i$

$S_i$  = SOCOMI emission factor for pipe fitting component  $i$  (EPA-450/3-010, April 1982)

Compliance shall be demonstrated by calculations of annual emissions using the above equation and the actual annual hours of operation.

- 1. Emission Limitations for Emission Unit P022:

- i. Short-Term Limitations:

0.05 lbs CO/hr  
0.06 lbs NH<sub>3</sub>/hr

Applicable Compliance Method:

Emission limitations (short-term) were developed by applying a 95% reduction efficiency for control with an open flare to historical inlet stack testing results. Compliance shall be demonstrated by the monitoring and recordkeeping specified in section C.4.

- ii. Long Term Limitations

0.22 tons CO/yr  
0.26 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

- iii. Process Fugitive Emissions shall not exceed 47.39 tons VOC/yr

Applicable Compliance Method:

The process fugitive emission limitation was developed in accordance with the following equation:

$$PFE = (\sum_{i=1}^n N_i S_i) \times (\text{hrs/yr}) \times (\text{ton}/2000 \text{ lbs})$$

where:

PFE = Process fugitive VOC emissions,  
tons/yr

$N_i$  = Number of pipe fitting components  $i$

$S_i$  = SOCFI emission factor for pipe fitting component  $i$  (EPA-450/3-010, April 1982)

Compliance shall be demonstrated by calculations of annual emissions using the above equation and the actual annual hours of operation.

- m. Emission Limitation:

The flares controlling emission units P020, P021, & P022 shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

Compliance with the visible emission limitations shall be determined in accordance with 40 CFR 60, Appendix A - Method 22.

- n. Emission Limitations for Emissions Unit P023:

- i. Short-Term Limitations:

151.0 lbs VOC/hr  
200 lbs NH<sub>3</sub>/hr

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.2.d.

ii. Long-Term Limitations:

(a) 175.0 tons VOC/yr

Applicable Compliance Method:

Compliance shall be based upon the monitoring and recordkeeping specified in sections C.5 & C.6 above.

(b) 876.6 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

o. Emission Limitation (short-term) for emissions unit P902

i. Stack emissions  
(from evaporator and granulator stacks combined)

- (a) 12 lbs PE/hr
- (b) 0.51 lb VOC/hr
- (c) 18.2 lbs NH<sub>3</sub>/hr

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.2.e.

(d) 20% opacity as a six-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with 40 CFR 60, Appendix A - Method 9.

ii. Fugitive emissions

20% Opacity as a three-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with 40 CFR 60, Appendix A - Method 9.

p. Emission Limitation (long-term) for emissions unit P902

i. Stack emissions:

52.56 tons PE/yr  
2.23 tons VOC/yr  
79.72 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

ii. Fugitive emissions:

(a) 5.26 tons PE/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying a 1.2 lb/hr emission factor based on engineering estimates by a maximum operation schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. The annual emission limitations are based on the emission unit's potential to emit. Therefore, no annual recordkeeping or deviation reporting is required to demonstrate compliance with these limits.

(b) 1.01 tons VOC/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying a 0.23 lb/hr emission factor based on engineering estimates by a maximum operation schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. The annual emission limitations are based on the emission unit's potential to emit. Therefore, no annual recordkeeping or deviation reporting is required to demonstrate compliance with these limits.

(c) 1.31 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying a 0.3 lb/hr emission factor based on engineering estimates by a maximum operation schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. The annual emission limitations are based on the emission unit's potential to emit. Therefore, no annual recordkeeping or deviation reporting is required to demonstrate compliance with these limits.

q. Emission Limitation (short-term) for emissions unit P903

i. Stack emissions:

- (a) 12.0 lbs PE/hr
- (b) 0.5 lb VOC/hr
- (c) 13.7 lbs NH<sub>3</sub>/hr

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.2.e.

(d) 20% opacity as a six-minute average (from stack)

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with 40 CFR 60, Appendix A - Method 9.

ii. Fugitive emissions:

20% Opacity as a three-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with 40 CFR 60, Appendix A - Method 9.

r. Emission Limitation (long-term) for emissions unit P903

i. Stack emissions:

52.56 tons PE/yr  
2.19 tons VOC/yr  
60.01 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

ii. Fugitive emissions:

(a) 3.94 tons PE/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying a 0.9 lb/hr emission factor based on engineering estimates by a maximum operation schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. The annual emission limitation is based on the emission unit's potential to emit. Therefore, no annual recordkeeping or deviation reporting is required to demonstrate compliance with this limit.

(b) 1.01 tons VOC/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying a 0.23 lb/hr emission factor based on engineering estimates by a maximum operation schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. The annual emission limitation is based

on the emission unit's potential to emit. Therefore, no annual recordkeeping or deviation reporting is required to demonstrate compliance with this limit.

- (c) 1.31 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying a 0.3 lb/hr emission factor based on engineering estimates by a maximum operation schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. The annual emission limitation is based on the emission unit's potential to emit. Therefore, no annual recordkeeping or deviation reporting is required to demonstrate compliance with this limit.

- s. Emission Limitation (short-term) for emissions unit P904

- i. Stack emissions (baghouse)

- (a) 0.7 lb PE/hr
    - (b) 0.3 lb NH<sub>3</sub>/hr

Applicable Compliance Method:

Compliance shall be determined by emission testing as specified in section E.2.f.

- (c) 20% opacity as a six-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with 40 CFR 60, Appendix A - Method 9.

- ii. Fugitive emissions

20% opacity as a three-minute average

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with 40 CFR 60, Appendix A - Method 9.

- t. Emission Limitations (long-term) for emissions unit P904

i. Stack emissions (baghouse)

3.07 tons PE/yr  
1.31 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

ii. Fugitive emissions

(a) 5.26 tons PE/yr

Applicable Compliance Method:

Compliance shall be determined by use of the following equation and recordkeeping required in Section C.11.c:

$$\text{Tons PE/yr} = (\text{EF}) \times (\text{AP}) \times (1 - \text{CE}) \times 4.38$$

EF = 0.19 lb PE/ton, AP-42 emission factor

AP = Annual production of granular urea in tons/yr

CE = Assumed control efficiency of 90%

(b) 1.31 tons NH<sub>3</sub>/yr

Applicable Compliance Method:

The tons/yr limitation was developed by multiplying a 0.3 lb/hr emission factor based on engineering estimates by a maximum operation schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. The annual emission limitation is based on the emission unit's potential to emit. Therefore, no annual recordkeeping or deviation reporting is required to demonstrate compliance with this limit.

Note: No term or condition specifying a method for demonstrating compliance with any emission limitation or other requirement of this permit shall preclude the use by any person of any credible evidence to establish compliance with or a violation of this permit, the Clean Air Act, or any implementing regulations or rules promulgated thereunder.

## 2. Emission Testing Requirements

- a. The permittee shall determine the net heating value of the gas being combusted in the flares controlling emission units P021 & P022 using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

where:

$H_T$  = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of gas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

$C_i$  = Concentration of sample component  $i$  in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77; and

$H_i$  = Net heat of combustion of sample component  $i$ , kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 if published values are not available or cannot be calculated.

$K$  = Constant,  $1.740 \times 10^{-7}$  (1/ppm) (g mole/scm) (MJ/kcal) where the standard temperature for (g mole/scm) is 20°C

- b. The permittee shall determine the actual exit velocity of the flares controlling emission units P021 & P022 by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
- c. The permittee shall conduct, or have conducted, emission

testing for emission units B001, B002, and B003 in accordance with the following requirements:

- i. The emission testing shall be conducted within 3 months after the start-up of this emissions unit.
- ii. The emission testing shall be conducted to demonstrate compliance with the mass emission rate for NO<sub>x</sub> and CO.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

NO<sub>x</sub> - Method 7 or 7E, 40 CFR Part 60, Appendix A

CO - Method 10, 40 CFR Part 60, Appendix A

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

- d. The permittee shall conduct, or have conducted, emission testing for emission unit P023 in accordance with the following requirements:
  - i. The emission testing shall be conducted in accordance with the following the schedule:
    - (a) within 3 months after the start-up of the emissions unit.
    - (b) emission testing (VOC only) shall be performed a minimum of one time per year.
    - (c) emission testing (VOC only) shall also be performed within 3 months following any change or replacement in process catalyst used for this emissions unit.
  - ii. The emission testing shall be conducted to demonstrate compliance with the mass emission rate for following pollutants:
    - (a) VOC
    - (b) NH<sub>3</sub>
  - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

(a) VOC: Method 25 or 25A, 40 CFR Part 60, Appendix A

(b) NH<sub>3</sub>: Modified Method 5, 40 CFR Part 60, Appendix A

(i) *The Method 5 impinger solutions of deionized, distilled water will be replaced by 0.1N sulfuric acid solution for ammonia collection. The impinger contents will be analyzed for ammonia using the NIOSH Method 6701 and the sampling train particulate filter will be analyzed for total ammonia. In addition, a 10 minute dry purge will be conducted after each test run to minimize potential off-gassing of free ammonia from the particulate filter and sample.*

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

- e. The permittee shall conduct, or have conducted, emission testing for emission units P902 & P903 in accordance with the following requirements:
- i. The emission testing shall be conducted within 3 months after the start-up of the emissions unit.
  - ii. The emission testing shall be conducted to demonstrate compliance with the mass emission rate for the following pollutants:
    - (a) PE
    - (b) VOC
    - (c) NH<sub>3</sub>
  - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - (a) PE: Method 5, 40 CFR Part 60, Appendix A
    - (b) VOC: Method 25 or 25A, 40 CFR Part 60, Appendix A

(b) *NH3*: Modified Method 5, 40 CFR Part 60, Appendix A

(i) *The Method 5 impinger solutions of deionized, distilled water will be replaced by 0.1N sulfuric acid solution for ammonia collection. The impinger contents will be analyzed for ammonia using the NIOSH Method 6701 and the sampling train particulate filter will be analyzed for total ammonia. In addition, a 10 minute dry purge will be conducted after each test run to minimize potential off-gassing of free ammonia from the particulate filter and sample.*

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

- f. The permittee shall conduct, or have conducted, emission testing for emissions units P904 in accordance with the following requirements:
- i. The emission testing shall be conducted within 3 months after the start-up of this emissions unit.
  - ii. The emission testing shall be conducted to demonstrate compliance with the mass emission rate for the following pollutants:
    - (a) PE
    - (b)  $\text{NH}_3$
  - iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - (a) PE: Method 5, 40 CFR Part 60, Appendix A
    - (b) *NH3*: Modified Method 5, 40 CFR Part 60, Appendix A
      - (i) *The Method 5 impinger solutions of deionized, distilled water will be replaced by 0.1N sulfuric acid solution for ammonia collection. The impinger contents will be analyzed for ammonia using the NIOSH Method 6701 and the sampling train particulate filter will be analyzed for*

*total ammonia. In addition, a 10 minute dry purge will be conducted after each test run to minimize potential off-gassing of free ammonia from the particulate filter and sample.*

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

- g. The emission testing requirements contained in Section E.2 shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- h. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

## **F. Miscellaneous Requirements**

1. All start-up and shutdown activities for emissions units P020, P021, and P022 shall be reported in accordance with the provisions of OAC 3745-15-06.