Ohio Environmental Protection Agency

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

8/21/2015

Certified Mail

Raymond Sawyer
Hanging Rock Energy Facility
1395 County Rd 1A
Ironton, OH 45638

Facility ID: 0744000150
Permit Number: P0119342
County: Lawrence

RE: DRAFT AIR POLLUTION TITLE V PERMIT
Permit Type: Significant Permit Modification

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Ironton Tribune. A copy of the public notice, the Statement of Basis, 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 "Search for Permits" link under the Permitting topic on the Programs tab. 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
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662

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 if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Portsmouth City Health Dept., Air Pollution Unit at (740)353-5156.

Sincerely,

Michael E. Hopkins,P.E
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Portsmouth; Kentucky; West Virginia

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at:http://epa.ohio.gov/actions.aspx or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email:HClerk@epa.ohio.gov

Draft Title V Permit Significant Permit Modification
Hanging Rock Energy Facility
1395 County Rd 1A, , Ironton, OH 45638
ID#: P0119342
Date of Action: 8/21/2015
PermitDesc: Title V Significant Permit Modification due to the upgrade of four combustion turbines (P001, P002, P003 and P004) which increased emissions..
The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the ID # or: Anne Chamberlin, Portsmouth City Health Dept., Air Pollution Unit, 605 Washington Street 3rd Floor, Portsmouth, OH 45662. Ph: (740)353-5156

Statement of Basis For Air Pollution Title V Permit

Facility ID:	0744000150
Facility Name:	Hanging Rock Energy Facility
Facility Description:	1270 MW Combined Cycle Power Plant
Facility Address:	1395 County Rd 1A, Ironton, OH 45638
Permit #:	P0119342, Significant Permit Modification

This facility is subject to Title V because it is major for:
☐ Lead X Sulfur Dioxide X Carbon Monoxide X Volatile Organic Compounds X Nitrogen Oxides
X Particulate Matter ≤ 10 microns ☐ Single Hazardous Air Pollutant ☐ Combined Hazardous Air Pollutants
☐ Maximum Available Control Technology Standard(s) ☐ GHG ☐ Title IV

A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(U)?	Yes
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	PTI modification P0117322 was issued 7/15/15. This modification was to EU's P001, P002, P003 and P004 to upgrade the four natural gas fired combustion turbines which resulted in an increase in emissions. These modifications are classified as a Title I modification because these EU's are currently subject to an NSPS and this upgrade meets the definition of modification under 60.14 due to the increase in emissions.

Please identify the affected unit(s)and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	N/A
Please identify the affected unit(s) and pollutant(s) for which a Compliance Assurance Monitoring (CAM) Plan is required per 40 CFR 64. Provide more emissions unit specific detail in Section C.	N/A

B. Facility-Wide Terms and Conditions

Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	
B.2. and 3.	N	40 CFR Part 77	Insignificant Emissions Unit Requirements
	N	40 CFR Part 64	CAM is applicable for NOx, but exempt per 64.2(b)(1)(vi) because NOx CEMs are required by the Acid Rain Program and the permit.
B.4.	OAC rule 3745-109	N	State CAIR rule
B.5	N		Cross-State Air Pollution Rule (CSAPR)
B.6	N	40 CFR Part 60, Subpart KKKK	NSPS for Combustion Turbines which commenced modification after Feb.,18,2005

C. Emissions Unit Terms and Conditions

Key:
EU = emissions unit ID
ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)
OR = operational restriction
M = monitoring requirements
ENF = did noncompliance issues drive the monitoring requirements?
R = record keeping requirements
Rp = reporting requirements
ET = emission testing requirements (not including compliance method terms)
St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement
Misc = miscellaneous requirements

EU(s)	Limitation	Basis		ND	OR	M	ENF	R	Rp	ET	St	Misc	Comments
		SIP (3745-)	Other										
B001, B002	Nox: 0.035 lb/MMBtu, 1.07 lb/hr, 1.6 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	N	N	N	Basis - BACT limits; OR: - max. annual fuel heat input limit, natural gas only; ET - inherently clean fuel; OAC rule 3745-31-05 includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits.
B001, B002	SO2: 0.001 lb/MMBtu, 0.031 lb/hr, 0.046 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	N	N	N	Basis - BACT limits; OR: - max. annual fuel heat input limit, natural gas only and max. sulfur content limit; ET - inherently clean fuel; OAC rule 3745-31-05 includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits. The emission limit was established in accordance with OAC Chapter 31 and is equivalent to or more stringent than the emission limitation in 40 CFR Part 60, Subpart Dc.
B001, B002	CO: 0.037 lb/MMBtu, 1.13 lb/hr, 1.69 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	N	N	N	Basis - BACT limits; OR: - max. annual fuel heat input limit and natural gas only ; ET - inherently clean fuel; OAC rule 3745-31-05 includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits.
B001, B002	VOC: 0.016 lb/MMBtu, 0.49 lb/hr, 0.74 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	N	N	N	Basis - BACT limits; OR - max. annual fuel heat input limit and natural gas only ; ET - inherently clean fuel; OAC rule 3745-31-05 includes compliance with these rules.

													Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits.
B001, B002	PM: 0.01 lb/MMBtu, 0.31 lb/hr, 0.46 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	N	N	N	Basis - BACT limits; OR: - max. annual fuel heat input limit and natural gas only ; ET - inherently clean fuel; OAC rule 3745-31-05 includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits. The emission limit was established in accordance with OAC Chapter 31 and is equivalent to or more stringent than the emission limitation in 40 CFR Part 60, Subpart Dc.
B001, B002	20% Opacity	OAC rule 3745-17-07(A)	N	N	Y	N	N	N	N	N	N	N	Basis - equivalent to BAT OR - natural gas only; M,R,R,RP,ET - inherently clean fuel
P001, P002, P003, P004	Nox: 2.9 ppmvd and 22.3 lb/hr w/o duct burner; 2.9 ppmvd and 28.7 lb/hr w/duct firing; 125.7 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	Y	Y	Y	Basis - BACT limits; OR - startup and shutdown limitations; St – The emission limitation and M,R,Rp requirements were established in accordance with OAC Ch 31 and are equivalent to or more stringent then the requirements in 40 CFR Part 60, Subparts Da and KKKK. Misc - SCR O&M plan; Exempt from CAM requirements per 40 CFR 64.2(b)(1)(vi) since CEM is required by the Acid Rain program (Nox is only pollutant that meets CAM applicability.) ORC 3704.03(T) includes compliance with these rules.
P001, P002, P003, P004	CO: 6 ppmvd and 28.0 lb/hr w/o duct burner; 8 ppmvd and 47.9 lb/hr w/duct firing; 285.4 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	Y	N	N	Basis - BACT limits; OR - startup and shutdown limitations; ORC 3704.03(T) includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits
P001, P002, P003, P004	PM/PM10/PM2.5: 10.2 lb/hr w/o duct burner; 14.6 lb/hr w/duct firing; 63.9 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	N	Y	N	Y	Y	Y	Y	N	Basis - BACT limits; St – The emission limitation and M,R,Rp requirements were established in accordance with OAC Ch 31 and are equivalent to or more stringent then the requirements in 40 CFR Part 60, Subparts Da. ORC 3704.03(T) includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits.

P001, P002, P003, P004	SO2: 1.2 lb/hr w/o duct burner; 1.6 lb/hr w/duct firing; 7.0 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	Y	Y	N	Basis - BACT limits; OR - natural gas only, sulfur content limitation St – The emission limitation and M,R,Rp requirements were established in accordance with OAC Ch 31 and are equivalent to or more stringent then the requirements in 40 CFR Part 60, Subparts Da and KKKK. ORC 3704.03(T) includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits.
P001, P002, P003, P004	VOC: 3.1 lb/hr w/o duct burner; 6.2 lb/hr w/duct firing; 40.1 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	Y	N	N	Basis - BACT limits; OR - startup and shutdown limitations; ORC 3704.03(T) includes compliance with these rules. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits.
P001, P002, P003, P004	H2SO4: 0.19lb/hr w/o duct burner; 0.24 lb/hr w/duct firing; 1.1 tpy	OAC rule 3745-31-01 through 3745-31-20	40 CFR Part 52.21	N	N	Y	N	Y	Y	N	N	N	Basis - BACT limits; ET - if required ORC 3704.03(T) includes compliance with these rules. Not subject to MACT Subpart YYYY b/c turbines are not located at major source of HAP emissions. Quarterly reporting is considered prompt reporting because this emission unit operates well within the allowable emissions limits.
P001, P002, P003, P004	20 % Opacity	OAC rule 3745-17-07(A)	N	N	Y	N	N	N	N	N	N	N	OR - natural gas only; M,R.RP,ET - performed initial test, inherently clean fuel;
P005, P006	PM/PM10: 2.60 lb/hr, 11.39 tpy	OAC rule 3745-31-10 through 3745-31-20	40 CFR Part 52.21	N	Y	Y	N	Y	Y	N	N	N	Basis - BACT limits; OR - TDS content limitation; ET - compliance based on mass balance (TDS of water and drift loss factor); OAC rule 3745-31-05 includes compliance with these rules.
P005, P006	20% Opacity	OAC rule 3745-17-07(A)(1)	N	N	Y	N	N	N	N	N	N	N	Basis - equivalent to BAT OR - TDS content limitation; M,R,Rp - total disolved solids (TDS) monitoring

													ET - compliance based on mass balance (TDS of water and drift loss factor);

DRAFT

Division of Air Pollution Control
Title V Permit
for
Hanging Rock Energy Facility

Facility ID:	0744000150
Permit Number:	P0119342
Permit Type:	Significant Permit Modification
Issued:	8/21/2015
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
Hanging Rock Energy Facility

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Authorization

Facility ID:	0744000150
Facility Description:	1270 MW Combined Cycle Power Plant
Application Number(s):	A0053986
Permit Number:	P0119342
Permit Description:	Title V Significant Permit Modification due to the upgrade of four combustion turbines (P001, P002, P003 and P004) which increased emissions.
Permit Type:	Significant Permit Modification
Issue Date:	8/21/2015
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0110486

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

Hanging Rock Energy Facility
1395 County Rd 1A
Ironton, OH 45638

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

Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662
(740)353-5156

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Portsmouth City Health Dept., Air Pollution Unit. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

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

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordingsfor continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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

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

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

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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Portsmouth City Health Dept., Air Pollution Unit. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

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

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

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

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

from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

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

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

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

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

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

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Portsmouth City Health Dept., Air Pollution Unit unless otherwise specified.

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

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

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

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

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

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

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

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

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

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

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

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

7. General Requirements

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

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

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

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

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

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

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

8. Fees

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

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

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

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

11. Reopening for Cause

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

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

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

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

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

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

12. Federal and State Enforceability

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

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

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible

Officialthat, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

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

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

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

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

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

c) The permittee shall submit progress reports to the Portsmouth City Health Dept., Air Pollution Unit concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

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

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

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Portsmouth City Health Dept., Air Pollution Unit) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

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

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

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

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

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

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Portsmouth City Health Dept., Air Pollution Unit with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Portsmouth City Health Dept., Air Pollution Unit as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met.

This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

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

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

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

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

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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

22. Permanent Shutdown of an Emissions Unit

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

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

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

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

23. Title VI Provisions

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

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

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

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

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

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

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to thePortsmouth City Health Dept., Air Pollution Unit.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention RequirementsUnder State Law Only

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

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine

whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

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

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Portsmouth City Health Dept., Air Pollution Unit in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Portsmouth City Health Dept., Air Pollution Unit must be notified in writing of any transfer of this permit.

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

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

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

30. Submitting Documents Required by this Permit

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

B. Facility-Wide Terms and Conditions

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

   a) None.

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

   P007 - 400 KW Emergency generator - Caterpillar #3406 - 1DZ04376 (OAC rule 3745-31-03, PBR issued 11/21/06);
   P008 - 400 KW Emergency generator - Caterpillar #3406-1DZ04353 (OAC rule 3745-31-03, PBR issued 11/21/06);
   P009 - 250 HP Emergency fire pump - John Deere #RG6081A145158 (OAC rule 3745-31-03, PBR issued 11/21/06); and
   P010 -335 KW emergency generator (water treatment)-Caterpillar #3406-1DZ11940 (OAC rule 3745-31-03, PBR issued 1/22/07)

   [Authority for term: 3745-77-07(A)(13)**]**

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

   F200 - Plant roadways and parking areas (formerly Z018);
   T200 - Fuel oil tank for PB1 EDG (formerly Z004);
   T201 - Fuel oil tank for PB1 EDG (formerly Z006);
   T202 - Fuel oil tank for EDFP (formerly Z008);
   T203 - Plant gasoline storage tank (formerly Z009);
   T204 - Plant diesel storage tank (formerly Z010);
   T205 - PB1 Ammonia storage tank (formerly Z011);
   T206 - PB2 Ammonia storage tank (formerly Z012);
   T207 - Sulfuric acid storage tank for WTB (formerly Z013);
   T208 - Sulfuric acid storage tank for PB1 (formerly Z014);
   T209 - Sulfuric acid storage tank for PB2 (formerly Z015);
   T210 - Oil water separator tank for PB1 (formerly Z016);
   T211 - Oil water separator tank for PB2 (formerly Z017); and
   T212 - Diesel generator storage tank.

4. The permittee shall ensure that any CAIR NO_x, SO_2, or NO_x ozone season units complies with the requirements of OAC Chapter 3745-109, which includes submitting timely permit applications. The permittee shall ensure that the affected emissions units comply with those requirements as outlined in the permit application submitted as required by OAC rules 3745-109-03, 3745-109-10 and 3745-109-16 for the affected emissions units.

The permittee shall also comply with any subsequent federally mandated programs that may replace the CAIR program affecting electric generating facilities.

Note: Ohio EPA DAPC has completed proposed rule amendments for OAC chapter 3745-14, specifically, OAC rule 3745-14-01 and OAC rule 3745-14-06, which facilitated the transition of the affected units from OAC chapter 3745-14 into the federal Clean Air Interstate Rule (CAIR) program which began with the 2009 control periods. This began the process of "sunsetting" the parts of OAC chapter 3745-14 which were no longer needed as a result of Ohio's CAIR rules (OAC chapter 3745-109).

On April 29th, 2014, the United States Supreme Court upheld EPA's Cross –State Air Pollution Rule (CSAPR) commonly known as the "Transport Rule" and reversed the 2012 decision by the U.S. Court of Appeals for the District of Columbia invalidating the rules. At this time, CAIR remains in place and no immediate action from States or affected sources is expected. The CAIR allowances for affected units and requirements of the CAIR rule will continue pending further guidance from USEPA on implementing CAIR.

[Authority for term: OAC rules 3745-109 and 3745-77-07(A)(5)]

5. Cross-State Air Pollution Rule (CSAPR)-subject units at this Title V source are subject to CSAPR applicable requirements. These applicable requirements will be included in the Title V permit terms and conditions prior to issuance of the Final Title V permit based on the May 13, 2015 U.S. EPA guidance document titled "Title V Permit Guidance and Template for the Cross-State Air Pollution Rule" available at: http://www.epa.gov/crossstaterule/pdfs/CSAPR_Title_V_Permit_Guidance.pdf

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

6. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart KKKK, Standards of Performance for New Stationary Sources (NSPS) Stationary Combustion Turbines: P001, P002, P003 and P004. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group -Aux boilers: B001,B002,

EU ID	Operations, Property and/or Equipment Description
B001	30.6 MMBtu/hr natural gas fired boiler
B002	30.6 MMBtu/hr natural gas fired boiler

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

(1) b)(1)h, d)(4), d)(5), d)(6), d)(7) and e)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20	Nitrogen oxides (NO_x) emissions shall not exceed 0.035 lb/mmBtuactual heat input, 1.07 lbs/hr and 1.6 tons per rolling, 12-month period. Sulfur dioxide (SO_2) emissions shall not exceed 0.001 lb/mmBtu actual heat input, 0.031 lb/hr and 0.046 ton per rolling, 12-month period. Carbon monoxide (CO) emissions shall not exceed 0.037 lb/mmBtuactual heat input, 1.13 lbs/hr and 1.69 tons per rolling, 12-month period. Volatile organic compounds (VOC) emissions shall not exceed 0.016 lb/mmBtu actual heat input, 0.49 lb/hr and 0.74 ton per rolling, 12-month period. Particulate (PM/PM_{10}) emissions shall not exceed 0.01 lb/mmBtuactual heat input, 0.31 lb/hr and 0.46 ton per rolling, 12-month period. See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3) (PTI 07-00503 as issued 12/28/04)	The requirements of this rule also include compliance with therequirements of 40 CFR Part 60,Subpart Dc, OAC rule 3745-18-06(A), OAC3745-17-10(B)(1), OAC rule3745-17-07(A), 40 CFR 52.21, OACrules 3745-31-10 through 3745-31-20 and OAC rule 3745-31-05(D).
c.	40 CFR Part 60, Subpart Dc	See b)(2)a.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions fromany stack shall not exceed 20%opacity as a 6-minute average,except as provided by the rule.
e.	OAC rule 3745-31-05(D)	See b)(2)c and c)(2).
f.	OAC rule 3745-18-06(A)	See b)(2)a.
g.	OAC rule 3745-17-10(B)(1)	See b)(2)a.
h.	OAC rule 3745-114	See d)(4) through d)(7) and e)(4).

(2) Additional Terms and Conditions

a. The requirements of this applicable rule are less stringent than the requirements of 40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20.

b. Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of natural gas, low sulfur fuel and low NO_x burners constitutes BACT for this emissions unit. The emission limitations based on the BACT requirements are listed under 40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20 above.

c. The requirements of this applicable rule are equivalent to the NO_x, SO_2, and PM/PM_{10} emissions per 40 CFR Part 52.21 and OAC rules 3745-31-10 through 3745-31-20

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 cubic feet.

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(A)(1)]

(2) The maximum annual fuel heat input for this emissions unit shall not exceed 91,500 mmBtu, based upon a rolling, 12-month summation of heat input values.

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall monitor the sulfur content and gross calorific value of the fuel being fired in this emissions unit. Fuel sampling and analysis shall be conducted according to the procedures and at the frequency specified by 40 CFR Part 75, Appendix D.

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

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

a. monthly fuel heat input (mmBtu); and

b. the rolling, 12-month summation of fuel heat input (mmBtu).

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

(4) The permit to install for these emissions units(B001, B002) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

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

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

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological

Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

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

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

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

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

Pollutant: Formaldehyde
TLV (ug/m3): 272
Maximum Hourly Emission Rate (lb/hr): 1.98*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.93
MAGLC (ug/m3): 6.48

Pollutant: Sulfuric Acid
TLV (ug/m3): 1000
Maximum Hourly Emission Rate (lb/hr): 8.8*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 8.875
MAGLC (ug/m3): 24

Pollutant: Ammonia
TLV (ug/m3): 17000
Maximum Hourly Emission Rate (lb/hr): 151.2*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 153.83
MAGLC (ug/m3): 405

Pollutant: Toluene
TLV (ug/m3): 188,000
Maximum Hourly Emission Rate (lb/hr): 1.02*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.023
MAGLC (ug/m3): 4476

Pollutant: Xylene
TLV (ug/m3): 434,000
Maximum Hourly Emission Rate (lb/hr): 0.5*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.94
MAGLC (ug/m3): 10333

Pollutant: Acetaldehyde
TLV (ug/m3): 180,000

Maximum Hourly Emission Rate (lb/hr): 0.311*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.842
MAGLC (ug/m3): 4286

Pollutant: Hexane
TLV (ug/m3): 176,000
Maximum Hourly Emission Rate (lb/hr): 0.44*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.585
MAGLC (ug/m3): 4190

Pollutant: Zinc
TLV (ug/m3): 5000
Maximum Hourly Emission Rate (lb/hr): 0.29*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.69
MAGLC (ug/m3): 119
* This was modeled for emissions units B001, B002, P001, P002, P003 and P004 combined.

[Authority for term: PTI 07-00503, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

(5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

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

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

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the

emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[Authority for term: PTI 07-00503, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

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

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

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

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

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

[Authority for term: PTI 07-00503, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

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

[Authority for term: PTI 07-00503, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

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.

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per 100 standard cubic feet.

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

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel heat input limitation.

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

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

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

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

f) Testing Requirements

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

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

0.035 lb/mmBtu and 1.07 lbs/hr NO_x

<u>Applicable Compliance Method:</u>

Compliance with the lb/mmBtu emission limitation may be demonstrated using the manufacturer supplied emission factor of 0.035 lb/mmBtu.

Compliance with the lbs/hr emission limitation may be demonstrated by multiplying the manufacturer supplied NO_x emission factor (0.035 lb/mmBtu) by the actual heat input rate (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu and lb/hr emission limitations through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

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

0.001 lb/mmBtu and 0.031 lb/hr SO_2

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be demonstrated using the manufacturer supplied emission factor of 0.001 lb/mmBtu.

Compliance with the lb/hr emission limitation may be demonstrated by multiplying the manufacturer supplied SO_2 emission factor (0.001 lb/mmBtu) by the actual heat input rate (mmBtu/hr).

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

c. Emission Limitation:

0.037 lb/mmBtu and 1.13 lbs/hr CO

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be demonstrated using the manufacturer supplied emission factor of 0.037 lb/mmBtu.

Compliance with the lbs/hr emission limitation may be demonstrated by multiplying the manufacturer supplied CO emission factor (0.037 lb/mmBtu) by the actual heat input rate (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu and lb/hr emission limitations through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

d. Emission Limitation:

0.016 lb/mmBtu and 0.49 lb/hr VOC

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be demonstrated using the manufacturer supplied emission factor of 0.016 lb/mmBtu.

Compliance with the lb/hr emission limitation may be demonstrated by multiplying the manufacturer supplied VOC emission factor (0.016 lb/mmBtu) by the actual heat input rate (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu and lb/hr emission limitations through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

e. Emission Limitation:

0.01 lb/mmBtu and 0.31 lb/hr PM/PM_{10}

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be demonstrated using the manufacturer supplied emission factor of 0.01 lb/mmBtu.

Compliance with the lb/hr emission limitation may be demonstrated by multiplying the manufacturer supplied PM/PM_{10} emission factor (0.01 lb/mmBtu) by the actual heat input rate (mmBtu/hr)

If required, the permittee shall demonstrate compliance with the lb/mmBtu and lb/hr emission limitations through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and 40 CFR Part 51, Appendix M, Method 202. Alternative USEPA-approved test methods may be used with prior approval by Ohio EPA.

f. Emission Limitations:

Emissions, in tons per rolling, 12-month period, shall not exceed the following:

NO_x - 1.6;
SO_2 - 0.046;
PM/PM_{10} - 0.46;
CO - 1.69; and
VOC - 0.74.

Applicable Compliance Method:

Compliance with the annual emission limitations shall be demonstrated by multiplying the actual fuel heat input (mmBtu/yr) by the associated emission factors (lb/mmBtu) specified in section f)(1) or emissions unit specific emission factors established through emission testing, and then dividing by 2,000 lbs/ton.

g. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group -Combustion turbines: P001,P002,P003,P004,

EU ID	Operations, Property and/or Equipment Description
P001	GE 7FA natural gas fired dry low NO_x (DLN) combustion turbine No. 1,nominally rated at 2,045 MMBtu/hr, with duct burner nominally rated at 587 MMBtu/hr operating in combined cycle mode controlled by Selective Catalytic Reduction (SCR).
P002	GE 7FA natural gas fired dry low NO_x (DLN) combustion turbine No. 2,nominally rated at 2,045 MMBtu/hr, with duct burner nominally rated at 587 MMBtu/hroperating in combined cycle mode controlled by Selective Catalytic Reduction (SCR).
P003	GE 7FA natural gas fired dry low NO_x (DLN) combustion turbine No. 3,nominally rated at 2,045 MMBtu/hr, with duct burner nominally rated at 587 MMBtu/hroperating in combined cycle mode controlled by Selective Catalytic Reduction (SCR).
P004	GE 7FA natural gas fired dry low NO_x (DLN) combustion turbine No. 4,nominally rated at 2,045 MMBtu/hr, with duct burner nominally rated at 587 MMBtu/hroperating in combined cycle mode controlled by Selective Catalytic Reduction (SCR).

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

(1) d)(12) through d)(15) and e)(10).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20	**EMISSION LIMITS WITHOUT DUCT BURNER FIRING** Nitrogen oxides (NO_x) emissions shall not exceed 2.9 ppmvd at 15% oxygen (based on a 3-hour block averaging period). NO_x emissions shall not exceed 22.3 pounds per hour. Particulate ($PM/PM_{10}/PM_{2.5}$) emissions shall not exceed 10.2 pounds per hour. Sulfur dioxide (SO_2) emissions shall not exceed 1.2 pounds per hour. Carbon monoxide (CO) emissions shall

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		not exceed 6 ppmvd at 15% oxygen (based on a 24-hour block averaging period). CO emissions shall not exceed 28.0 pounds per hour. Volatile organic compounds (VOC) emissions shall not exceed 3.1 pounds per hour. Sulfuric acid (H_2SO_4) emissions shall not exceed 0.19 pound per hour . **EMISSION LIMITS WITH DUCT BURNER FIRING** NO_x emissions shall not exceed 2.9 ppmvd at 15% oxygen (based on a 3-hour block averaging period). NO_x emissions shall not exceed 28.7 pounds per hour . $PM/PM_{10}/PM_{2.5}$ emissions shall not exceed 14.6 pounds per hour. SO_2 emissions shall not exceed 1.6 pounds per hour. CO emissions shall not exceed 8 ppmvd at 15% oxygen (based on a 24-hour block averaging period). CO emissions shall not exceed 47.9 pounds per hour. VOC emissions shall not exceed 6.2 pounds per hour. H_2SO_4 emissions shall not exceed 0.24 pound per hour. **TOTAL ANNUAL EMISSIONS** NO_x emissions shall not exceed 125.7 tons per year based on a rolling, 12-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		month average, including startup and shutdown emissions. SO_2 emissions shall not exceed 7.0 tons per year based on a rolling, 12-month average. $PM/PM_{10}/PM_{2.5}$ emissions shall not exceed 63.9 tons per year based on a rolling, 12-month average. CO emissions shall not exceed 285.4 tons per year based on a rolling, 12-month average, including startup and shutdown emissions. VOC emissions shall not exceed 40.1 tons per year based on a rolling, 12-month average, including startup and shutdown emissions. H_2SO_4 emissions shall not exceed 1.1 tons per year based on a rolling, 12-month average. See b)(2)c.
b.	ORC 3704.03(T) (PTI P0117322 as issued on 7/15/15)	See b)(2)d.
c.	40 CFR Part 60, Subpart KKKK (40 CFR 60.4300-4420) [In accordance with 40 CFR 60.4305(a), this emission unit is a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel which commenced construction, modification, or reconstruction after February 18, 2005].	New, modified or reconstructed turbines firing natural gas with a heat input capacity greater than 850 MMBtu/hr are required to limit NO_x emissions to less than 15 ppm at 15% O_2 or 54 ng/J of useful output (0.43 lb/MWh). SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2MMBtu heat input.
d.	40 CFR Part 75	See b)(2)b.
e.	OAC chapter 3745-109	See B.4.
f.	OAC rule 3745-18-06(F)	Exempt per OAC rule 3745-18-06(A)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		since natural gas is the only fuel burned
g.	OAC rule 3745-17-11(B)(4)	See b)(2)a.
h.	OAC rule 3745-17-07(A)	Visible particulate emissions from this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
i.	OAC chapter 3745-103	See b)(2)b.
j.	OAC rule 3745-114-01	See d)(12) through d)(15) and e)(10).
k.	40 CFR Part 64	See b)(2)e.

(2) Additional Terms and Conditions

a. The emission limitation required by this applicable rule is equivalent to or less stringent than the emission limitation established pursuant to 40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20.

b. The permittee is subject to the requirements of OAC chapter 103 and 40 CFR Parts 72 and 75 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.

c. The permittee performed a Best Available Control Technology (BACT) review for NO_x, SO_2, CO, PM_{10}, H_2SO_4, and VOC in the initial PTI 07-00503, issued 12/13/2001. This permit modification did not trigger PSD, so a new BACT review was not necessary. The emission limitations based on the BACT requirements are listed under 40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20 above. The following determinations were made for each pollutant:

PM - Burning natural gas in an efficient combustion turbine. For this permit, it is assumed that all PM emissions include $PM_{10}$and $PM_{2.5}$;

NO_x - Use of DLN burners and employment of SCR with a controlled rate of 2.9ppmvd at 15% oxygen (based on a 3-hour block averaging period);

CO - Use of good combustion practices with a rate of 6 ppmvd at 15% oxygen (based on a 24-hour block averaging period) without duct firing and 8ppmvd at 15% oxygen (based on a 24-hour block averaging period) with duct firing;

VOC - Use of efficient combustion technology in the operation of the turbine;

SO_2 - Burning natural gas in an efficient combustion turbine and burning low sulfur fuel; and

H_2SO_4 - Burning natural gas in an efficient combustion turbine.

d. The BATrequirements for NO_x, CO, VOC, SO_2 and $PM/PM_{10}/PM_{2.5}$are equivalent to the annual NO_x, CO, VOC, SO_2 and $PM/PM_{10}/PM_{2.5}$ emission limitations established per 40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20.

e. This rule is applicable for NO_x, but exempt per 64.2(b)(1)(vi) because NO_x CEMs are required by the Acid Rain Program and the permit.

f. The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The fuel flow monitor/meter shall be maintained as required in Part 75, Appendix D. Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous NO_x monitoring system in accordance with the frequencies required pursuant to 40 CFR Part 60 and 40 CFR Part 75; or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B, in lieu of frequencies required in 40 CFR Part 60. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits pursuant to 40 CFR Part 60, and linearity checks pursuant to 40 CFR Part 75; however, linearity checks completed pursuant to 40 CFR Part 75, Appendix B, may be substituted for the quarterly cylinder gas or relative accuracy audits required per 40 CFR Part 60.

g. The permittee shall maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR 60, or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; however, the quarterly cylinder gas audit and relative accuracy audit frequency requirements may be

adjusted to coincide with linearity checks completed for continuous emissions monitoring systems subject to 40 CFR Part 75, Appendix B requirements.

h. The permittee shall maintain a written quality assurance/quality control plan for the continuous O_2 monitoring system, designed to ensure continuous valid and representative readings of O_2 emissions in units of the applicable standard(s). Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous O_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous O_2 monitoring system in accordance with the frequencies required pursuant to 40 CFR Part 60 and 40 CFR Part 75; or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B, in lieu of frequencies required in 40 CFR Part 60. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits pursuant to 40 CFR Part 60, and linearity checks pursuant to 40 CFR Part 75; however, linearity checks completed pursuant to 40 CFR Part 75, Appendix B, may be substituted for the quarterly cylinder gas or relative accuracy audits required per 40 CFR Part 60.

i. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

c) Operational Restrictions

(1) The permittee shall burn only pipeline quality natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.5 grain per 100 standard cubic feet.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(A)(1)]

(2) Startup shall be defined as the period between when the combustion turbine is initially started until the combustion turbine achieves combustion operational Mode 6. Shutdown shall be defined as the period beginning when the combustion turbine leaves operational Mode 6 and ending when combustion has ceased. Mode 6 is defined by the manufacturer as the low emissions mode during which all 6 of the burner nozzles are in use, burning a lean premixed gas for steady-state operation (i.e., in compliance with the NO_x and CO lbs/hr emission limitations listed in b)(1) above). The continuous emission monitoring system will indicate and record the combustion turbine operational mode, including when the emissions unit is shutdown and when operating in start-up and shutdown modes. This system will also be used to demonstrate compliance with the NO_x and CO emissions limitations during steady-state operation (Mode 6) and startups/shutdowns.

Startups shall not exceed 250 minutes in duration and shutdowns shall not exceed 120 minutes in duration. The total of all start-ups and shutdowns shall be limited to 260 cycles (each cycle consists of one start-up and one shutdown) per year.

Each startup and shutdown shall be limited to the following:

Pollutant	*Maximum Emission Rate (lbs/hr per turbine)*
NO_x	400
CO	1,658
VOC	94

Compliance with the above CO and NO_xlbs/hr startup and shutdown emission limitations shall be demonstrated using the continuous emissions monitoring system based on a 1-hour block average. Compliance with the VOC lbs/hr startup and shutdown emission limitation shall be demonstrated through the record keeping requirements specified in section d) of this permit.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(A)(1)]

(3) Except during periods of startup, the SCR shall be in operation at all times including periods of shutdown mode of the unit.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(A)(1)]

(4) This emissions unit has been in operation more than 12 months and, as such, the permittee has existing records to generate the rolling, summation of emissions upon issuance of this permit.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(A)(1)]

(5) The permittee shall comply with all applicable operational requirements under 40 CFR Part 60, Subpart KKKK (40 CFR 60.4300-4420) after modification of each emissions unit.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

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

a. the natural gas usage rate (in standard cubic feet);

b. the hours of operation of the combustion turbine;

c. the number of start-ups, and the duration, in minutes, of each start-up;

d. the number of shutdowns, and the duration, in minutes, of each shutdown;

e. the total number of start-up/shutdown cycles;

f. the VOC emissions for each start-up/shutdown event, in tons, by using the emission factor of 94 pounds per hour during startup and shutdown;

g. the total VOC emissions, in tons, not including start-up/shutdown emissions;

h. the total NO_x emissions, in tons, including start-up/shutdown emissions;

i. the total CO emissions, in tons, including start-up/shutdown emissions;

j. the total VOC emissions, in tons, including start-up/shutdown emissions (i.e., f+g);

k. the total SO_2, $PM/PM_{10}/PM_{2.5}$, NH_3, formaldehyde, and H_2SO_4 emissions, in pounds;

l. the rolling, 12-month summation of the NO_x emissions, in tons, including start-up/shutdown emissions;

m. the rolling, 12-month summation of the total CO emissions, in tons, including start-up/shutdown emissions;

n. the rolling, 12-month summation of the VOC emissions, in tons, including start-up/shutdown emissions; and

o. the rolling, 12-month summation of the SO_2, H_2SO_4 and $PM/PM_{10}/PM_{2.5}$ emissions, in tons.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall operate and maintain equipment to continuously monitor* and record NO_x emissions from this emissions unit in the units established in this permit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or as approved by the Ohio EPA, Central Office.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NO_xin units established in this permit in the appropriate averaging period during Mode 6, and including start-up and shutdown;

c. results of quarterly cylinder gas audits or linearity checks;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

In conjunction with the operation of the NO_x CEMS, the permittee shall operate and maintain a system to monitor when the duct burners are being fired. The data measured by this system shall be compiled with the data recorded by the NO_x CEMS.

* The installation and operation of systems to continuously monitor and record emissions of NO_x may be performed in lieu of monitoring the fuel consumption and ration of water or steam of the fuels being fired in the turbine, as required by 40 CFR 60.4335(b).

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60 Appendices B & F and 40 CFR Part 75]

(3) The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in the units established in this permit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or as approved by the Ohio EPA, Central Office.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of CO in units established in this permit in the appropriate averaging period during Mode 6, and including start-up and shutdown

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit and continuous CO monitoring system;

g. the date, time, and hours of operation of the emissions unit without the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous CO monitoring system; and

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

In conjunction with the operation of the CO CEMS, the permittee shall operate and maintain a system to monitor when the duct burners are being fired. The data measured by this system shall be compiled with the data recorded by the CO CEMS.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), 40 CFR 60.13 and 40 CFR Part 60 Appendices B & F]

(4) The permittee shall operate and maintain equipment to continuously monitor and record O_2 emitted from this emissions unit in percent O_2. The continuous monitoring and recording equipment shall comply with the requirements specified 40 CFR Part 60.13 and/or 40 CFR Part 75, or as approved by the Ohio EPA, Central Office.

The permittee shall maintain records of data obtained by the continuous O_2 monitoring system including, but not limited to:

a. percent $O_2$for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits or linearity checks;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit and continuous O_2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O_2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O_2 monitoring system; and

h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60 Appendices B & F and 40 CFR Part 75]

(5) The permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the approved data substitution protocol.

Fuel flow data that is substituted in accordance with 40 CFR Part 75, Appendix D, is not to be used when verifying compliance with the hourly NO_x and CO pounds per hour emission limits. Hours in which fuel flow is substituted should be included as NO_x and CO monitoring system downtime.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

(6) The permittee shall monitor the sulfur content and gross calorific value of the fuel being fired in the combustion turbine and duct burner. In accordance with 40 CFR Part 60, Subpart KKKK, section 60.4365, the permittee can be exempted from monitoring the total sulfur content of the fuel if they demonstrate, through representative fuel sampling data, that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input.The allowable SO_2 limits in section b)(1) are based on a factor of 0.0006 lb/MMBtu which is default for pipeline quality natural gas in 40 CFR Part 75 Appendix D. Therefore, the permittee shall demonstrate compliance with the 0.0006 lb/MMBtu since it is more stringent than the Subpart KKKK sulfur content limit, after modification of each emissions unit. The permittee shall use one of the following sources of information to make the required demonstration:

a. the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for natural gas is 0.5 grain of sulfur or less per 100 standard cubic feet and has potential sulfur emissions of less than 0.060lb SO_2/mmBtu heat input;

b. representative fuel sampling data which show that the sulfur content of the fuel does not exceed 0.0006lb SO_2/mmBtu heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

Per 40 CFR Part 75, Appendix D section 2.3.1.4, the permittee has demonstrated that the gaseous fuel is pipeline natural gas. Therefore, ongoing sampling of the fuel's sulfur content is required annually and whenever the fuel supply sources change. Sampling and analysis of the fuel gross calorific value is required monthly.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

(7) The permittee shall determine the hourly heat input rate to the combustion turbine and duct burner from the fuel flow rate as determined in d)(5) and gross calorific value as determined in d)(6). The heat input rate shall be calculated in accordance with the procedures in section 5 of 40 CFR Part 75, Appendix F.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

(9) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NO_x monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; the accuracy requirements of Performance Specification 6; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The permittee shall document that the fuel flow monitor/meter meets 40 CFR 75 certification requirements prior to the performance specification test, and shall demonstrate how the pound per hour emissions of NO_x is being calculated stoichiometrically. The letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60 Appendix B and 40 CFR Part 75]

(10) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous carbon monoxide (CO) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate), and the accuracy requirements of Specification 6. The permittee shall document that the fuel flow monitor/meter meets 40 CFR 75 certification requirements prior to the performance specification test, and shall demonstrate how the pound per hour emissions of CO is being calculated stoichiometrically. The letter(s)/document(s) of certification under Part 60 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60 Appendix B and 40 CFR Part 75]

(11) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O_2 monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The letter(s)/document(s) of certification under Part 60 and certification or recommendation

for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60 Appendix B and 40 CFR Part 75]

(12) The permit to install for these emissions units(P001-P004) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

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

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

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

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

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

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

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

Pollutant: Formaldehyde
TLV (ug/m3): 272
Maximum Hourly Emission Rate (lb/hr): 1.98*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.93
MAGLC (ug/m3): 6.48

Pollutant: Sulfuric Acid
TLV (ug/m3): 1000
Maximum Hourly Emission Rate (lb/hr): 8.8*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 8.875
MAGLC (ug/m3): 24

Pollutant: Toluene
TLV (ug/m3): 188,000
Maximum Hourly Emission Rate (lb/hr): 1.02*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.023
MAGLC (ug/m3): 4476

Pollutant: Xylene
TLV (ug/m3): 434,000
Maximum Hourly Emission Rate (lb/hr): 0.5*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.94
MAGLC (ug/m3): 10333

Pollutant: Acetaldehyde
TLV (ug/m3): 180,000
Maximum Hourly Emission Rate (lb/hr): 0.311*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.842
MAGLC (ug/m3): 4286

Pollutant: Hexane
TLV (ug/m3): 176,000
Maximum Hourly Emission Rate (lb/hr): 0.44*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.585
MAGLC (ug/m3): 4190

Pollutant: Zinc
TLV (ug/m3): 5000
Maximum Hourly Emission Rate (lb/hr): 0.29*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.69
MAGLC (ug/m3): 119

* This was modeled for emissions units B001, B002, P001, P002, P003 and P004, combined.

The permittee has demonstrated that emissions of the above air toxics, from emissions units B001, B002, P001, P002, P003 and P004, are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without

evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

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

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

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

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

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

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

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

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

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

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

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

(16) The permittee shall comply with all applicable monitoring and recordkeeping requirements under 40 CFR Part 60, Subpart KKKK (40 CFR 60.4300-4420) after modification of each emissions unit.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60]

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 occurred.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all records which show that the sulfur content of the natural gas exceeded 0.5 grain per 100 standard cubic feet;

b. all records which show that the start-up duration exceeded 250 minutes;

c. all records which show that the shutdown duration exceeded 120 minutes;

d. all records which show that the total number of start-up/shutdown cycles exceeded 260;

e. all exceedances of the NO_x, CO, and/or VOC start-up limitations; and

f. all exceedances of the rolling, 12-month NO_x, CO, VOC, SO_2 and/or $PM/PM_{10}/PM_{2.5}$ emission limitations.

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

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

(3) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content, the permittee must submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.4375 and40 CFR 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shut-down, and malfunction.

[Authority for term: PTI P0117322. OAC rule 3745-77-07(C)(1) and 40 CFR 60.7]

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

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, 40 CFR Parts 75, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

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

i. the facility name and address;

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

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

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified in e.(3)a;

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

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

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

viii. results and dates of quarterly cylinder gas audits or linearity checks;

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

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

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

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

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

Each report shall address the operations conducted and data obtained during the previous calendar quarter. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons), including all data collected during start-up and shutdown periods and all data generated pursuant to the missing data procedures specified in 40 CFR Part 75 and/or the approved data substitution protocol. Data substitution procedures from 40 CFR 75 are not to be used for showing compliance with the short term OAC 3745-31-10 through 3745-31-20 rule-based or NSPS-based limitation(s) in this permit.

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

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

Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Portsmouth local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[Authority for term: PTI P0117322. OAC rule 3745-77-07(C)(1), 40 CFR 60.7 and 40 CFR Part 75]

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

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

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

i. the facility name and address;

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

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

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified in e.(4)a;

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

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

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

viii. results and dates of quarterly cylinder gas audits;

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

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

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

xii. the date, time, and duration of any downtime** of the continuous CO monitoring system while the emissions unit was in operation; and

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

Each report shall address the operations conducted and data obtained during the previous calendar quarter. These reports shall also contain the total CO emissions for the calendar quarter (in tons), including all data collected during start-up and shutdown periods and all data generated pursuant to the missing data procedures specified in 40 CFR Part 75 and/or the approved data substitution protocol. Data substitution procedures from 40 CFR 75 are not to be used for showing compliance with the short term OAC 3745-31-10 through 3745-31-20 rule-based or NSPS-based limitation(s) in this permit.

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

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

Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Portsmouth local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[Authority for term: PTI P0117322. OAC rule 3745-77-07(C)(1) and 40 CFR 60.7]

(6) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of continuous O_2 monitoring system downtime and malfunction while the emissions unit was on line.

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

i. the facility name and address;

ii. the manufacturer and model number of the continuous O_2 monitor;

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

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

v. the total operating time of the continuous O_2 monitoring system while the emissions unit was in operation;

vi. results and dates of quarterly cylinder gas audits or linearity checks;

vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));

viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O_2 monitor out-of-control and the compliant results following any corrective actions;

ix. the date, time, and duration of any/each malfunction* of the continuous O_2 monitoring system while the emissions unit was in operation;

x. the date, time, and duration of any downtime* of the continuous O_2 monitoring system while the emissions unit was in operation; and

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

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

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

[Authority for term: PTI P0117322. OAC rule 3745-77-07(C)(1), 40 CFR 60.7 and 40 CFR Part 75]

(7) If using the fuel flow rate to stoichiometrically calculate the mass rate of emissions of NO_X and/or CO, in place of Specification 6 requirements, the permittee shall submit quarterly reports, to the appropriate Ohio EPA District Office or local air agency, that document the date, time, and duration of each malfunction and/or period of downtime of the continuous fuel flow monitoring system, while the emissions unit was in operation, and the reason (if known) and the corrective actions taken (if any) for each such event. If there was no downtime or malfunction of the continuous fuel flow monitoring system during any calendar quarter, the report shall be submitted so stating it. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

(8) The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems, electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by this Part.

[Authority for term: PTI P0117322. OAC rule 3745-77-07(C)(1), and 40 CFR Part 75]

(9) The permittee shall submit annual reports that specify the total NO_x, CO, $PM/PM_{10}/PM_{2.5}$, SO_2, VOC, NH_3, formaldehyde, and H_2SO_4 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1), ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

(11) The permittee shall comply with all applicable reporting requirements under 40 CFR Part 60, Subpart KKKK (40 CFR 60.4300-4420) after modification of each emissions unit.

[Authority for term: PTI P0117322, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60]

f) Testing Requirements

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

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

NO_x emissions shall not exceed:

2.9 ppmvd at 15% oxygen (based on a 3-hour block averaging period);
22.3 pounds per hour without duct firing;
28.7 pounds per hour with duct firing; and
125.7 tons per year based on a rolling, 12-month summation, including startup and shutdown emissions.

<u>Applicable Compliance Method</u>:

The permittee shall demonstrate compliance using Methods 1 through 4 and 7E and 20 of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR 60.4400. Alternative U.S.EPA approved test methods may be used with prior approval from Ohio EPA. See f)(2) for emission testing requirement.

Ongoing compliance with the NO_x emission limitations contained in this permit, 40 CFR Part 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping section of this permit; and through demonstration of compliance

with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60 and 40 CFR Part 75.

b. Emission Limitations:

$PM/PM_{10}/PM_{2.5}$ emissions shall not exceed:

10.2 pounds per hour without duct burner firing;
14.6 pounds per hour with duct burner firing; and
63.9 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitations through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and 40 CFR Part 51, Appendix M, Method 201A and 202. Alternative USEPA-approved test methods may be used with prior approval by Ohio EPA. See f)(2) for emission testing requirement.

The annual emission limitation was determined by multiplying the hourly emission rate with duct burner firing by 8,760 hrs/yr and dividing by 2000 lbs/ton.

Ongoing compliance shall be demonstrated through the record keeping requirements in d)(1).

c. Emission Limitations:

SO_2 emissions shall not exceed:

1.2 pounds per hour without duct burner firing;
1.6 pounds per hour with duct burner firing; and
7.0 tons per year based on a rolling, 12-month summation.

Applicable Compliance Methods:

The allowable emission limitations were derived using the default emission factor for pipeline quality Natural Gas in 40 CFR Part 75, Appendix D (0.0006 lb/MMbtu) and the maximum heat input of the turbine without duct burner (2,045 MMBtu/hr) or the maximum heat input of the turbine with duct burner firing (2,632 MMBtu/hr). The annual emission limitation was determined by multiplying the hourly emission limit with duct burner firing (1.6 lb/hr) by 8,760 hrs/yr and dividing by 2000 lbs/ton.

Compliance shall be demonstrated through testing performed in accordance with 60 CFR Part 60.4415.

d. Emission Limitations:

VOC emissions shall not exceed:

3.1 pounds per hour without duct burner firing;

6.2 pounds per hour with duct burner firing; and
40.1 tons per year based on a rolling, 12-month summation, including startup and shutdown emissions.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitations through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25. Alternative USEPA-approved test methods may be used with prior approval by Ohio EPA. See f)(2) for emission testing requirement.

The annual emission limitation was determined by the sum of the emissions during startup/shutdown and the emissions during normal operation.

Ongoing compliance shall be demonstrated through the record keeping requirements ind)(1).

e. Emission Limitations:

CO emissions shall not exceed:

6 ppmvd at 15% oxygen without duct burner firing (based on a 24-hour block averaging period);
8ppmvd at 15% oxygen with duct burner firing (based on a 24-hour block averaging period);
28.0 pounds per hour without duct burner firing;
47.9 pounds per hour with duct burner firing; and
285.4 tons per year based on a rolling, 12-month summation, including startup and shutdown emissions.

Applicable Compliance Method:

The permittee shall demonstrate compliance using Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S.EPA approved test methods may be used with prior approval from Ohio EPA. See f)(2) for emission testing requirement.

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

f. Emission Limitations:

H_2SO_4 emissions shall not exceed:

0.19 pound per hour without duct burner firing;

0.24 pound per hour with duct burner firing; and
1.1 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation may be demonstrated by multiplying the emission factor of 0.000091lb/mmBtu (extrapolated from the SO_2 emissions factor) by the maximum heat input.

Compliance with the tpy emission limitation shall be demonstrated based upon the record keeping requirements specified in section d)(1).

If required, the permittee shall demonstrate compliance by emission testing in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 8.

g. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

h. Emission Limitation:

In accordance with 40 CFR 60.4320(a), new, modified or reconstructed turbines firing natural gas with a heat input capacity greater than 850 MMBtu/hr are required to limit NO_x emissions to less than 15 ppm at 15% O_2 or 54 ng/J of useful output (0.43 lb/MWh).

Applicable Compliance Method:

After modification of each emissions unit, compliance shall be demonstrated using a NO_x CEMS employed in accordance with the requirements specified in 40 CFR 60.4340(b)(1), 60.4335(b), 60.4345 and 60.4350. An initial performance test shall be conducted in accordance with the requirements specified in 40 CFR 60.4405.

i. Emission Limitation:

In accordance with 40 CFR 60.4330(a), SO_2 emissions from the turbine must not exceed 0.90 lb/MWh of gross output, or fuels burned in the turbine must not contain sulfur in concentrations which would result in potential sulfur emissions in excess of 0.060 lb SO_2MMBtu heat input.

Applicable Compliance Method:

After modification of each emissions unit, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR 60.4360, 60.4365, and 60.4370. Initial and subsequent performance tests shall be conducted in accordance with the requirements specified in 40 CFR 60.4415.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

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

a. The emission testing shall be conducted in conjunction with the next scheduled RATA testing, after issuance of this Permit to Install and modification of each emissions unit, but not later than 180 days after initial startup of the modified emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for CO, NO_x, PM/PM_{10},/$PM_{2.5}$, and VOC, in the appropriate averaging period(s).

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

for CO, Methods 1 thru 4 and 10 of 40 CFR Part 60, Appendix A;

for NO_x, Methods 1 thru 4 and 7E/20 of 40 CFR Part 60, Appendix A, and the procedures specified in 40 CFR 60.4400;

for PM/PM_{10},/$PM_{2.5}$, Method 5 of 40 CFR Part 60, Appendix A; and Methods 201A and 202 of 40 CFR Part 51, Appendix M; and

for VOC, Methods 1 through 4 and 25, of 40 CFR Part 60, Appendix A.

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

d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified by the Ohio EPA or Portsmouth Local Air Agency. Although this 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 under these conditions 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 Portsmouth 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

f. Personnel from the Portsmouth 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.

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 Portsmouth 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 Portsmouth Local Air Agency.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) In accordance with good engineering practices, the SCR units on emission units P001-P004 shall be operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall maintain on site a copy of the operation and maintenance manual, as provided by the manufacturer.

[Authority for term: PTI P0117322 and OAC rule 3745-77-07(C)(1)]

3. Emissions Unit Group -cooling towers: P005,P006,

EU ID	Operations, Property and/or Equipment Description
P005	10 Cell Mechanical Draft Cooling Tower
P006	10 Cell Mechanical Draft Cooling Tower

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20	Particulate (PM/PM_{10}) emissionsshall not exceed 2.60 lbs/hr. PM/PM_{10}emissions shall notexceed 11.39 tpybased on a rolling,12-month average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) (PTI 07-00503 as issued 12/28/04)	See b)(2)b.
c.	OAC rule 3745-17-11(B)(4)	See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions fromany stack shall not exceed 20%opacity as a 6-minute average,except as provided by the rule. See b)(2)d.

(2) Additional Terms and Conditions

a. Per the requirements of 40 CFR 52.21, the permittee is required to perform a Best Available Control Technology (BACT) review for PM/PM_{10}. The implementation of drift eliminators constitutes BACT for this emissions unit.

b. The requirements of this applicable rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20, OAC rule 3745-17-07(A) and 40 CFR Part 52.21.

c. The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

d. It shall not be deemed to be a violation of this rule, where the presence of uncombined water is the only reason for visible particulate emissions from the stack exceeding 20% opacity as a 6-minute average.

c) Operational Restrictions

(1) The permittee shall maintain an average total dissolved solids content of 3,000 ppm or less in the combined circulating cooling water discharge for emissions units P005 and P006.

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform the following monitoring requirements on a monthly basis:

a. test and record the total dissolved solids content of the combined circulating water discharge for emissions units P005 and P006, in ppm; and

b. determine and record the average total dissolved solids content based on a rolling, 12-month average.

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain monthly records of the hours of operation of this emissions unit.

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

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify any exceedances of the average total dissolved solids content limitation. These quarterly reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

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

PM/PM_{10} emissions shall not exceed 2.60 lbs/hr and 11.39 tpy.

<u>Applicable Compliance Methods:</u>

Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the maximum drift loss factor of 0.001 percent by the circulating water flow rate (gal/min), and by the average total dissolved solid content (ppm) of the cooling water, and by the appropriate conversion factors (8.34 lbs/gal, 60 min/hr), and then dividing by 1,000,000 (ppm).

If required, the permittee shall submit a testing proposal that will demonstrate that the maximum drift loss does not exceed 0.001 percent.

Compliance with the annual emission limitation shall be demonstrated by multiplying the hourly emission rate by the actual monthly operating hours, and then dividing by 2000 lbs/ton. The monthly emissions shall be added to the previous 11 months to determine the rolling, 12-month total emissions.

b. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: PTI 07-00503 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.