Ohio Environmental Protection Agency

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

1/7/2016

Certified Mail

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

Mr. Gareth Dolan
Troy Energy, LLC
22379 Pemberville Road
Luckey, OH 43443

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0387000377
Permit Number: P0119482
Permit Type: Administrative Modification
County: Wood

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA)Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

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

Cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Indiana; Canada

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Troy Energy, LLC

Facility ID:	0387000377
Permit Number:	P0119482
Permit Type:	Administrative Modification
Issued:	1/7/2016
Effective:	1/7/2016

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Troy Energy, LLC

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Authorization

Facility ID:	0387000377
Facility Description:	670 MW Peaking Station Consisting of four Natural Gas/#2 Oil fired turbines and (2) 2,200,000 gallon storage tank.
Application Number(s):	M0003535
Permit Number:	P0119482
Permit Description:	Administrative permit modification to remove secondary short term emission limits and to allow for "Black Start" operations
Permit Type:	Administrative Modification
Permit Fee:	$1,000.00
Issue Date:	1/7/2016
Effective Date:	1/7/2016

This document constitutes issuance to:

Troy Energy, LLC
22379 Pemberville Road
Luckey, OH 43443

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0119482
Permit Description: Administrative permit modification to remove secondary short term emission limits and to allow for "Black Start" operations

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

Group Name: Combustion Turbines

Emissions Unit ID:	**P001**
Company Equipment ID:	Combustion Turbine 1
Superseded Permit Number:	03-13362
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	Combustion Turbine 2
Superseded Permit Number:	03-13362
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	Combustion Turbine 3
Superseded Permit Number:	03-13362
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	Combustion Turbine 4
Superseded Permit Number:	03-13362
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

(1) Standard Term and Condition A.2.a), Severability Clause

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

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

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

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

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

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

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

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

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

2. Severability Clause

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

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

3. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

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

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

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

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

a) 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 of an 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 appropriate Ohio EPA District Office or contracted

local air agency, 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 electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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

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 ORC section 3704.08.

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

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

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

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

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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s)not exempt from the requirement to obtain a Permit-to-Install.

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

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

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

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted,no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

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

   a) None.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group -Combustion Turbines: P001,P002,P003,P004,

EU ID	Operations, Property and/or Equipment Description
P001	1,570 mmBtu/hr (Nominal) combustion turbine
P002	1,570 mmBtu/hr (Nominal) combustion turbine
P003	1,570 mmBtu/hr (Nominal) combustion turbine
P004	1,570 mmBtu/hr (Nominal) combustion turbine

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

(1) d)(6) – d)(8).

a) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Control requirements, See b)(2)a. When firing natural gas, emissions shall not exceed: 0.037 lb nitrogen oxides (NOx)/mmBtu heat input and 241.0 tons NOx/yr 0.0015 lb sulfur dioxide (SO2)/mmBtu heat input and 10.0 tons SO2/year 0.018 lb carbon monoxide (CO)/mmBtu heat input and 133.0 tons CO/yr 0.0017 lb volatile organic compounds (VOC)/mmBtu heat input and 12.5 tons VOC/year 0.010 lb particulate emissions (PE)/mmBtu heat input and 74.8 tons PE/yr 1.7 lbs formaldehyde/hr and 7.0 tons formaldehyde/yr

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Visible particulate emissions shall not exceed 10 percent opacity as a six-minute average When firing number 2 fuel oil/distillate oil, emissions shall not exceed: 0.1765 lb NOx/mmBtu heat input and 180.8 tons NOx/yr 0.052 lb SO2 /mmBtu heat input and 52.8 tons SO2/year 0.036 lb CO/mmBtu heat input and 36.9 tons CO/yr 0.0040 lb VOC/mmBtu heat input and 4.1 tons VOC/year 0.020 lb PE/mmBtu heat input and 20.0 tons PE/yr 0.48 lb formaldehyde/hr and 0.3 tons formaldehyde/yr
b.	OAC rule 3745-31-05(D)	Group emissions limits from P001, P002, P003 and P004, combined: 52.8 tons SO2, 133.0 tons CO, 241.0 tons NOx, 74.8 tons PE, 7.0 tons of any individual HAP, and 16.0 tons of combined HAPs [See b)(2)e.] All of the emission limitations above are based on rolling, 12-month periods.
c.	OAC rule 3745-17-07(A)	When firing number 2 fuel oil/distillate oil: Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(B)(4)	See b)(2)b.
e.	OAC rule 3745-18-06(F)	See b)(2)b.
f.	40 CFR, Part 60, Subpart GG	See b)(2)c.
g.	40 CFR, Part 75	See b)(2)d.
h.	OAC rule 3745-103	See b)(2)d.

(2) Additional Terms and Conditions

a. The permittee shall install and maintain dry low NOx burners and a water injection system on this emissions unit.

b. The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).

c. The emissions limits based on this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.

d. If the permittee is subject to the requirements of 40 CFR, Part 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.

e. The emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003 and P004 combined, shall not exceed 7.0 tons per year for any individual HAP and 16.0 tons per year for any combination of HAPs, per rolling 12 month period.

b) Operational Restrictions

(1) The maximum annual fuel usage for emissions units P001, P002, P003 and P004 combined, shall not exceed any of the following:

a. 14,020 million cubic feet of natural gas per rolling 12-month period;

b. 15.77 million gallons of number 2 fuel oil/distillate oil usage per rolling 12-month period;

c. a cumulative 14,020 million cubic feet fuel (natural gas and number 2 fuel oil/distillate oil usage) per rolling 12-month period where:

1 million cubic feet of natural gas = 1 million cubic feet of fuel and;

1 million gallons of number 2 fuel oil/distillate oil = 889 million cubic feet of fuel

*This permit is an administrative modification of Permit to Install (PTI) 03-13362 issued 1/23/2007. As such, emissions unit has been in operation for greater than 12 months, and therefore has the necessary records to demonstrate compliance with this restriction upon issuance of this permit.

(2) As specified in the permittee's PTI application, the maximum design electric output of this unit is 191.2 MW*, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.88 million cf/hr with a lower heat value of 931 Btu/cf (1749.5 mmBtu/hr), at -10 degrees F. As specified in the permittee's PTI application, the maximum design electric output of this unit is 196.9 MW*, measured at the generator terminal, when using number 2 fuel oil/distillate oil. This value corresponds to a maximum fuel flow of 15,306 gallons/hr with a lower heat value of 129,930 Btu/gallon (1988.7 MM Btu/hr), at -10 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up shall be defined as the time necessary to bring the unit to its minimum operating temperature (as recommended by the vendor), but under no circumstances shall it exceed 60 minutes in duration. Shutdown periods shall not exceed 60 minutes in duration.

* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include citing requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

(3) With the exception of startup and shutdown periods and during “Black Start” periods for emissions units P002 and P003, emissions units P001-P004 shall be operated at a minimum of 50% load. The permittee may petition the Ohio EPA, Northwest District Office (NWDO) to operate at a greater load range if it can demonstrate to the Agency's satisfaction that the emissions unit will comply with all applicable emission limits in this permit, and modeling requirements pursuant to Engineering Guide number 69.

(4) The permittee shall burn only natural gas and number 2 fuel oil/distillate oil in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.5 grains/scf. The maximum sulfur content of the number 2 fuel oil/distillate oil shall not exceed 0.05 percent by weight.

c) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for emissions units P001, P002, P003, and P004, combined:

a. the quantity of natural gas fired, in million cubic feet ;

b. the quantity of number 2 oil/distillate oil fired, in gallons;

c. the monthly emission rate* for PE, NOx, SO2, CO, any individual and combined HAP, in tons;

d. the rolling, 12- month summation of the quantity of natural gas fired, number 2 fuel oil/distillate oil fired, and the cumulative fuel usage [as defined in c)(1)c.]; and

e. the rolling, 12- month summation of the emission rate for PE, NOx, SO2, CO, any individual and combined HAP.

* The permittee shall use continuous monitoring data or the most recent testing/emissions data or available for each respective pollutant, in conjunction with the quantity of fuel fired, as recorded above, to determine monthly emissions. The monthly emissions calculations shall include all startup and shutdown periods and all "Black Start" periods. The monthly emission calculations may also include an adjustment for the average ambient temperature for that month the unit is operating.

(2) For each day during which the permittee burns a fuel other than natural gas or number 2 fuel oil/distillate oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(3) The information management system for this emissions unit shall be capable of monitoring and recording electric output (in MW), fuel flow (gallons and million cubic feet), and hours of operation.

(4) Analyses for the purposes of determining the sulfur content of the natural gas may be performed by the permittee, the fuel vendor, or any other qualified agency as follows: ASTM D 2880-71, 78, or 96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80 or 90 (Re-approved 1994), D 4084-82 or 94, D 3246-81, 92, or 96 (updated to 6667), or D 5504, shall be used for the sulfur content of gaseous fuels. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Ohio EPA, Northwest District Office.

The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used if they comply with the requirements specified in 40 CFR, Part 60.13, or upon written approval by the Ohio EPA, Central Office. The frequency of the sampling shall be such that it complies with the requirements specified in 40 CFR, Part 60.334. A custom fuel monitoring schedule may be used if approved by the Ohio EPA, Northwest District Office.

(5) Except for periods described in 40 CFR part 60.13, the permittee shall install, operate, and maintain equipment to continuously monitor* and record NOx from this emissions unit in units of the applicable standard and those specified 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.

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

* The installation and operation of systems to continuously monitor and record emissions of NOx may be performed in lieu of continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

(6) The original permit to install for these emissions units (P001, P002, P003 and P004, PTI #03-13362 issued 1/23/2007) were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the MAGLC. The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Formaldehyde
TLV (ug/m3): 272.69
Maximum Hourly Emission Rate (lbs/hr): 3.4*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.076
MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid
TLV (ug/m3): 1000
Maximum Hourly Emission Rate (lbs/hr): 44.0*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.983
MAGLC (ug/m3): 23.8

*This was modeled for emissions units P001, P002, P003, & P004 combined.

(7) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include 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 compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" 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(QQQ)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (QQQ)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

(8) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

a. description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

d) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or number 2 fuel oil/distillate oil was burned in this emissions unit. These reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(2) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage limitations. These reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.

(4) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 0.5 grains/scf, or the sulfur content of the number 2 fuel oil/distillate oil exceed the 0.05% by weight limit established in this permit. These reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(5) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition c)(2) above, malfunctions, extreme temperature conditions, etc.), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous NOx monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

(6) Pursuant to OAC rules 3745-15-04, 3745-35-02, 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 Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

(7) The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of c)(3) above. These reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(8) In lieu of the excess emissions reports required in 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for these emissions units in accordance with this permit.

e) Testing Requirements

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

a. Emission Limitations:

When firing natural gas:

0.037 lb NOx/mmBtu heat input and 241.0 tons NOx/yr

When firing number 2 fuel oil:

0.1765 lb NOx/mmBtu heat input and 180.8 tons NOx/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the above lb/mmBtu limitations. Continued compliance with these emission limitations shall be demonstrated by the continuous emissions monitoring requirement as described in condition d)(5) and the reporting requirement as described in e)(5).

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

b. Emission Limitations:

When firing natural gas:

0.010 lb PE/mmBtu heat input and 74.8 tons PE/yr

When firing number 2 fuel oil:

0.02 lb PE/mmBtu heat input and 20.0 tons PE/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

c. Emission Limitations:

When firing natural gas:

0.0015 lb SO2/mmBtu heat input and 10.0 tons SO2/yr

When firing number 2 fuel oil:

0.052 lb SO2/mmBtu heat input and 52.8 tons SO2/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the lb/mmBtu heat input limitations by maintaining compliance with conditions c)(4) and d)(4). If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Provided compliance is demonstrated with the hourly emission limitation, compliance with the respective lbs/mmBtu heat input limitation will be assumed. Compliance with the annual emission limitation shall be determined by the recordkeeping required in condition d)(1)e.

d. Emission Limitations:

When firing natural gas:

0.0017 lb VOC/mmBtu heat input and 12.5 tons VOC/yr

When firing number 2 fuel oil:

0.004 lb VOC/mmBtu heat input and 4.1 tons VOC/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lb/mmBtu heat input limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

e. Emission Limitations:

When firing natural gas:

0.018 lb CO/mmBtu heat input and 133.0 tons CO/yr

When firing number 2 fuel oil:

0.036 lb CO/mmBtu heat input and 36.9 tons CO/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

f. Emission Limitations:

When firing natural gas:

1.7 lb formaldehyde/hr, 7.0 tons formaldehyde/yr

When firing number 2 fuel oil:

0.48 lb formaldehyde/hr, 0.3 ton formaldehyde/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr emission limitation when firing natural gas. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the lbs/hr emission limitation when firing number 2 fuel oil shall be demonstrated by the multiplying the AP-42 emission factor table 3.1-4 (4/2000) by the maximum fuel usage defined in condition c)(2). If required, the permittee shall demonstrate compliance by emission testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

g. Emission Limitations:

52.8 tons of SO2 per rolling 12-month period

133.0 tons of CO per rolling 12-month period

241.0 tons of NOx per rolling 12-month period

74.8 tons PE per rolling 12-month period

7.0 tons of any individual HAP per rolling 12-month period

16.0 tons of combined HAPs per rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined by the recordkeeping requirements in condition d)(1)e.

h. Emission Limitations:

Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average;

Visible particulate emissions when burning fuel oil shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions limitations established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

f) Miscellaneous Requirements

(1) Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

(2) For the continuous NOx monitoring system, the permittee shall maintain information detailing the proposed location of the sampling site in accordance with the requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

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