OhioEPA

State of Ohio Environmental Protection Agency

Street Address: 1800 WaterMark Drive, Columbus, OH 43215-1099

**TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address: P.O. Box 1049, Columbus, OH 43216-1049

01/15/98

**CERTIFIED MAIL**

**RE: Proposed Title V Chapter 3745-77 permit**
17-10-00-0101
CNG Transmission Corp. - Carroll Station

Attn: Genevieve Damico AR-18J
United States Enviromental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for CNG Transmission Corp. - Carroll Station, has been created in Ohio EPA's State Air Resources System (STARS) on 01/15/98, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: North Ohio Valley Air Authority
Becky Castle, DAPC PMU

OhioEPA

# Ohio EPA

State of Ohio Environmental Protection Agency

## TITLE V PERMIT

Date: 01/15/98

## PROPOSED

Effective Date:

Expiration Date:

This document constitutes issuance to:

CNG Transmission Corp. - Carroll Station
8152 Bay Road SE
Carrollton, OH 44615

of a Title V permit for Facility ID: 17-10-00-0101

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:
B001 (Turbine #1)
Solar Centaur Turbine, Model T4702, 4390 HP

B002 (Turbine #2)
Solar Centaur Turbine, Model T4702, 4390 HP

B003 (Boiler #1)
Ajax Boiler, Model WGB-5500-D, 8.5 MMBtu/hr

B004 (Aux. Generator #1)
Waukesha Auxiliary Generator, Model VGF18GL, 778 HP

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. 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. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

North Ohio Valley Air Authority
814 Adams
Steubenville, OH 43952
(614) 282-3908

OHIO ENVIRONMENTAL PROTECTION AGENCY

_____

Director

# PART I - GENERAL TERMS AND CONDITIONS

## A. State and Federally Enforceable Section

### 1. Monitoring and Related Recordkeeping 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:

   i. The date, place (as defined in the permit), and time of sampling or measurements.
   ii. The date(s) analyses were performed.
   iii. The company or entity that performed the analyses.
   iv. The analytical techniques or methods used.
   v. The results of such analyses.
   vi. 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 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:

   i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
   ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
   iii. Written reports, which identify any deviations from the federally enforceable <u>monitoring</u>, <u>recordkeeping</u>, <u>and reporting requirements</u> contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. 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.

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

**2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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).

**3. 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.

**4. 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.

**5. 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.

**6. General Requirements**

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

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

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. 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.

**7. 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.

**8. 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.

**9. 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 general terms and conditions shall apply to all operating scenarios authorized in this permit.

**10. 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 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 3745-77-07.

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.

**11. 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.

**12. Compliance Requirements**

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

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

i. 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.
ii. 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.
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

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

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. 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 appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before March 15th of each year during the permit term.

ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

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

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

**13. 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.

**14. 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 3745-77-02(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

**15. 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.

**16. 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, except that no such notice shall be required for changes that qualify as insignificant emission 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; and

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.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

## B. State Only Enforceable Section

**1. 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.

## 2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

b. 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 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 appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

## 3. Records Retention Requirements

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.

## 4. 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.

## 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 of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. 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.

**8. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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

# Part II - Specific Facility Terms and Conditions

## A. State and Federally Enforceable Section

**None**

## B. State Only Enforceable Section

**1.** The following insignificant emissions units are located at this facility:

| | | |
|---|---|---|
| Z001 | Tank #1 | 1,000 gallon used oil tank, |
| Z002 | Tank #2 | 1,500 gallon floor drain tank, |
| Z003 | Tank #3 | 1,500 gallon separator hydrocarbon tank, |
| F004 | Fugitive VOC's | emergency relief and vapor blowdown |

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Turbine #1 (B001)

**Activity Description:** Solar Centaur Turbine, Model T4702, 4390 HP

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Solar Centaur Turbine, Model T4702, 4390 HP | OAC rule 3745-31-05<br>See A.VI. | See A.I.2. and A.II. below. |
| | 40 CFR Part 60, Subpart GG<br>See A.VI. | 42 parts per million, by volume, (ppmv) of NOx at 15% oxygen, on a dry basis. (This emission limit is less stringent than the BAT NOx emission limit in A.I.2. below.) |
| | OAC rule 3745-17-07(A)<br>See A.VI. | Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except for one 6-minute average period in any hour when up to 60 percent opacity is permissible. |
| | OAC rule 3745-17-11(B)(4)<br>See A.VI. | The particulate emissions from this emissions unit shall not exceed 0.040 LB PM/MMBtu of actual heat input. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not exceed the following emission limits:

i. 1.6 lbs/hr PM,
ii. 0.03 lb/hr SO2,
iii. 1.49 lbs/hr VOC,
iv. 7.15 lbs/hr NOx, and
v. 12.44 lbs/hr CO.

### II. Operational Restrictions

**1.** The fuel burned in this emissions unit shall not contain sulfur in excess of 0.8%, by weight (from 40 CFR Part 60.333(b)).

**2.** This emissions unit shall only be fired with natural gas.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall analyze and maintain records of the fuel-bound sulfur content in accordance with the "custom schedule" approved for this facility pursuant to 40 CFR Part 60.334.

**2.** In accordance with U.S. EPA guidance, the fuel-bound nitrogen content will be assumed to be zero.

## IV. Reporting Requirements

**1.** The permittee shall submit annual deviation reports which identify all periods during which the sulfur content of the fuel fired in this emissions unit exceeded 0.8%, by weight. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

**1.** NOx and CO Emissions Limitations:

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

a. The emissions testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.

b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for NOx and CO.

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

For NOx, Method 7e of 40 CFR Part 60, Appendix A

For CO, Method 10 of 40 CFR Part 60, Appendix A

Method 20 shall be used to determine the nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at 30, 50, 75, and 100 percent of the peak load condition.

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

**2.** OC Emissions Limitation

Compliance with the allowable OC emissions limitation shall be demonstrated by the use of the AP-42 OC emission factor for Large Uncontrolled Gas Turbines firing natural gas.

## V. Testing Requirements (continued)

**3.** PM Emission Limitations:

Compliance with the allowable PM emission limitation shall be demonstrated by the use of the AP-42 PM (solids) emission factor for Large Uncontrolled Gas Turbines firing natural gas.

**4.** Sulfur Content Limitation:

The sulfur content of the natural gas burned in this emissions unit shall be determined by the following ASTM methods for sulfur content of natural gas: ASTM D 1072-80, ASTM D3031-81, ASTM D3246-81, or ASTM D4084-82 as referenced in 40 CFR 60.335(d).

Compliance with the sulfur content limitation shall be demonstrated by the recordkeeping requirements in section A.III.1. of these terms and conditions.

**5.** Visible Emissions Limitation:

Compliance with OAC 3745-17-07(A) shall be demonstrated by the methods outlined in OAC 3745-17-03(B)(1).

**6.** SO2 Emissions Limitation:

Applicable compliance method: Multipy the AP-42, 5th Edition emission factor from table 3.1-2 (.094S lb/mm Btu; where S= the % sulfur in the fuel) by the maximum actual heat input for this emissions unit (43.7 MMBtu/hr). The sulfur content of the fuel shall be determined in accordance with the procedures specified in term and condition A.V.4. of this permit.

## VI. Miscellaneous Requirements

**1.** The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install number 17-1505, as issued on 7-17-96:

Part III, Special Terms and Conditions: A.I.-V and B.I.-V.

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Solar Centaur Turbine, Model T4702, 4390 HP | OAC rule 3745-31-05 See A.VI. | See B.I.2. below. |
| | OAC rule 3745-18-06(E) See A.VI. | 0.5 LB SO2/MMBtu of actual heat input. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not exceed the following emission limits:

i. 31.3 TPY NOx,
ii. 54.5 TPY CO,
iii. 6.5 TPY OC,
iv. 7.0 TPY PM, and
v. 0.13 TPY SO2.

### II. Operational Restrictions

**1. None**

### III. Monitoring and/or Record Keeping Requirements

**1. None**

### IV. Reporting Requirements

**1. None**

### V. Testing Requirements

**1.** Compliance with the emissions limitations in Section B.I of these terms and conditions shall be determined in accordance with the following methods:

a. Compliance with the annual NOx and CO emissions limitations shall be demonstrated by multiplying the observed hourly emissions rate from the most recent compliance test by the actual annual operating hours and dividing by 2000 lbs/ton.

b. Compliance with the annual OC, PM, and SO2 emission limits shall be demonstrated by multiplying the AP-42 emission factors for OC, PM, and SO2 (lb/MMBtu of actual heat input) for Large Uncontrolled Gas Turbines firing natural gas by the annual hours of operation and dividing by 2000 lbs/ton.

### VI. Miscellaneous Requirements

**1. None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Turbine #2 (B002)

**Activity Description:** Solar Centaur Turbine, Model T4702, 4390 HP

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Solar Centaur Turbine, Model T4702, 4390 HP | OAC rule 3745-31-05<br>See A.VI. | See A.I.2. and A.II. below. |
| | 40 CFR Part 60, Subpart GG<br>See A.VI. | 42 parts per million, by volume, (ppmv) of NOx at 15% oxygen, on a dry basis. (This emission limit is less stringent than the BAT NOx emission limit in A.I.2. below.) |
| | OAC rule 3745-17-07(A)<br>See A.VI. | Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except for one 6-minute average period in any hour when up to 60 percent opacity is permissible. |
| | OAC rule 3745-17-11(B)(4)<br>See A.VI. | The particulate emissions from this emissions unit shall not exceed 0.040 LB PM/MMBtu of actual heat input. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not exceed the following emission limits:

i. 1.6 lbs/hr PM,
ii. 0.03 lb/hr SO2,
iii. 1.49 lbs/hr VOC,
iv. 7.15 lbs/hr NOx, and
v. 12.44 lbs/hr CO.

### II. Operational Restrictions

**1.** The fuel burned in this emissions unit shall not contain sulfur in excess of 0.8%, by weight (from 40 CFR Part 60.333(b)).

**2.** This emissions unit shall only be fired with natural gas.

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall analyze and maintain records of the fuel-bound sulfur content in accordance with the "custom schedule" approved for this facility pursuant to 40 CFR Part 60.334.

**2.** In accordance with U.S. EPA guidance, the fuel-bound nitrogen content will be assumed to be zero.

## IV. Reporting Requirements

**1.** The permittee shall submit annual deviation reports which identify all periods during which the sulfur content of the fuel fired in this emissions unit exceeded 0.8%, by weight. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

**1.** NOx and CO Emissions Limitations:

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

a. The emissions testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.

b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for NOx and CO.

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

For NOx, Method 7e of 40 CFR Part 60, Appendix A

For CO, Method 10 of 40 CFR Part 60, Appendix A

Method 20 shall be used to determine the nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at 30, 50, 75, and 100 percent of the peak load condition.

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

**2.** OC Emissions Limitation

Compliance with the allowable OC emissions limitation shall be demonstrated by the use of the AP-42 OC emission factor for Large Uncontrolled Gas Turbines firing natural gas.

## V. Testing Requirements (continued)

**3.** PM Emission Limitations:

Compliance with the allowable PM emission limitation shall be demonstrated by the use of the AP-42 PM(solids) emission factor for Large Uncontrolled Gas Turbines firing natural gas.

**4.** Sulfur Content Limitation:

The sulfur content of the natural gas burned in this emissions unit shall be determined by the following ASTM methods for sulfur content of natural gas: ASTM D 1072-80, ASTM D3031-81, ASTM D3246-81, or ASTM D4084-82 as referenced in 40 CFR 60.335(d).

Compliance with the sulfur content limitation shall be demonstrated by the recordkeeping requirements in section A.III.1. of these terms and conditions.

**5.** Visible Emissions Limitation:

Compliance with OAC 3745-17-07(A) shall be demonstrated by the methods outlined in OAC 3745-17-03(B)(1).

**6.** SO2 Emissions Limitation:

Applicable compliance method: Multipy the AP-42, 5th Edition emission factor from table 3.1-2 (.094S lb/mm Btu; where S= the % sulfur in the fuel) by the maximum actual heat input for this emissions unit (43.7 MMBtu/hr). The sulfur content of the fuel shall be determined in accordance with the procedures specified in term and condition A.V.4. of this permit.

## VI. Miscellaneous Requirements

**1.** The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install number 17-1505 as issued on 7-17-96:

Part III, Special Terms and Conditions: A.I.-V and B.I.-V.

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Solar Centaur Turbine, Model T4702, 4390 HP | OAC rule 3745-31-05 See A.VI. | See B.I.2. below. |
| | OAC rule 3745-18-06(E) See A.VI. | 0.5 LB SO2/MMBtu of actual heat input. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not exceed the following emission limits:

i. 31.3 TPY NOx,
ii. 54.5 TPY CO,
iii. 6.5 TPY OC,
iv. 7.0 TPY PM, and
v. 0.13 TPY SO2.

### II. Operational Restrictions

**1. None**

### III. Monitoring and/or Record Keeping Requirements

**1. None**

### IV. Reporting Requirements

**1. None**

### V. Testing Requirements

**1.** Compliance with the emissions limitations in Section B.I of these terms and conditions shall be determined in accordance with the following methods:

a. Compliance with the annual NOx and CO emissions limitations shall be demonstrated by multiplying the observed hourly emissions rate from the most recent compliance test by the actual annual operating hours and dividing by 2000 lbs/ton.

b. Compliance with the annual OC, PM, and SO2 emission limits shall be demonstrated by multiplying the AP-42 emission factors for OC, PM, and SO2 (lb/MMBtu of actual heat input) for Large Uncontrolled Gas Turbines firing natural gas by the annual hours of operation and dividing by 2000 lbs/ton.

### VI. Miscellaneous Requirements

**1. None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Boiler #1 (B003)

**Activity Description:** Ajax Boiler, Model WGB-5500-D, 8.5 MMBtu/hr

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Ajax Boiler, Model WGB-5500-D, 8.5 MMBtu/hr | OAC rule 3745-31-05 See A.VI. | See A.I.2. below. |
| | OAC rule 3745-17-07(A) See A.VI. | Visible particulate emissions from the stack associated with B003 shall not exceed twenty percent opacity as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-10(B)(1) See A.VI. | 0.020 LB PM/MMBtu of actual heat input. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not exceed the following emission limits:

i. 1.53 LBS/HR NOx
ii. 0.128 LB/HR CO

### II. Operational Restrictions

**1.** This emissions unit shall only be fired with natural gas.

### III. Monitoring and/or Record Keeping Requirements

**1. None**

### IV. Reporting Requirements

**1. None**

### V. Testing Requirements

**1.** NOx and CO Emission Limitations:

Compliance with the allowable NOx and CO emission limitations shall be demostrated by the use of the manufacturer's emission factors (NOx - 1.53 lbs/hr and CO - 0.128 lb/hr).

**2.** Compliance with the visible particulate emission limitation in term and condition A.I.1. shall be determined in accordance with the test method and procedures in OAC 3745-17-03(B)(1).

## V. Testing Requirements (continued)

**3.** PM Emission Limitations:

Compliance with the allowable PM emission limitation shall be demonstrated by the use of the AP-42 PM emission factor for small gas fired boilers.

## VI. Miscellaneous Requirements

**1.** The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install number 17-1124 as issued on 12-30-92:

Part III, Special Terms and Conditions: A.I.-V. and B.I.-V.

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Natural gas fired boiler 8.5 MMBtu/hr. | OAC rule 3745-31-05<br>See A.VI. | See B.I.2. below. |
| | OAC rule 3745-18-06(C)<br>See A.VI. | Exempt per OAC rule 3745-18-06(A). |

**2. Additional Terms and Conditions**

**2.a** The VOC emissions from this emissions unit shall not exceed 0.2 TPY.

### II. Operational Restrictions

**1. None**

### III. Monitoring and/or Record Keeping Requirements

**1. None**

### IV. Reporting Requirements

**1. None**

### V. Testing Requirements

**1.** Compliance with the annual VOC emission limitation shall be demonstrated by multiplying the USEPA, 1986a emission factor of 5.3 lbs VOC/MM cu ft by 0.0085 MM cu ft/hr and by 8760 hours/yr, and dividing by 2000 lbs/ton.

### VI. Miscellaneous Requirements

**1. None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Aux. Generator #1 (B004)

**Activity Description:** Waukesha Auxiliary Generator, Model VGF18GL, 778 HP

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Waukesha Auxiliary Generator, Model VGF18GL, 778 HP | OAC rule 3745-31-05<br>See A.VI. | See A.I.2. below. |
| | OAC rule 3745-17-07(A)<br>See A.VI. | Visible particulate emissions from the stack associated with B004 shall not exceed twenty percent opacity as a six-minute average, except as specified by rule. |
| | OAC rule 3745-17-11(B)(5)(a)<br>See A.VI. | 0.25 LB PM/MMBtu of actual heat input. |

**2. Additional Terms and Conditions**

**2.a** This emissions unit shall not exceed the following emission limits:

i. 3.43 LBS/HR NOx
ii. 2.22 LBS/HR CO

### II. Operational Restrictions

**1.** This emissions unit shall only be fired with natural gas.

### III. Monitoring and/or Record Keeping Requirements

**1. None**

### IV. Reporting Requirements

**1. None**

### V. Testing Requirements

**1.** NOx and CO Emission Limitations:

Compliance with the allowable NOx and CO emission limits shall be demonstrated by the use of the manufacturer's emission factors (NOx - 3.43 lbs/hr and CO - 2.22 lbs/hr).

**2.** Compliance with the visible particulate emission limitation in term and condition A.I.1. shall be determined in accordance with the test method and procedures in OAC 3745-17-03(B)(1).

## V. Testing Requirements (continued)

**3.** Compliance with the particulate emission limit of 0.25 pound per million Btu of actual heat input shall be determined by use of the facility-provided particulate emission factor of 0.010 LB PM/mmBtu of actual heat input.

## VI. Miscellaneous Requirements

**1.** The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install number 17-1124 as issued on 12-30-92:

Part III, Special Terms and Conditions: A.I.-V. and B.I.-V.

## B. State Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Waukesha Auxiliary Generator, Model VGF18GL, 778 HP. | OAC rule 3745-31-05<br>See A.VI. | See B.I.2. below. |
| | OAC rule 3745-18-06(F)<br>See A.VI. | Exempt per OAC rule 3745-18-06(A). |

**2. Additional Terms and Conditions**

**2.a** The VOC emissions from this emissions unit shall not exceed 0.13 TPY.

### II. Operational Restrictions

**1. None**

### III. Monitoring and/or Record Keeping Requirements

**1. None**

### IV. Reporting Requirements

**1. None**

### V. Testing Requirements

**1.** Compliance with the annual VOC emission limitation shall be demonstrated by multiplying the USEPA, 1986a emission factor of 5.3 lbs VOC/MM cu ft by 0.0053 MM cu ft/hr and by 8760 hours/yr, and dividing by 2000 lbs/ton.

### VI. Miscellaneous Requirements

**1. None**

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