



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
WAYNE COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-19183

DATE: 4/29/2004

City of Wooster WPCP
Jim Borton
1123 Old Columbus Rd.
Wooster, OH 44691

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 4/29/2004
Effective Date: 4/29/2004**

FINAL PERMIT TO INSTALL 02-19183

Application Number: 02-19183
APS Premise Number: 0285030411
Permit Fee: **\$600**
Name of Facility: City of Wooster WPCP
Person to Contact: Jim Borton
Address: 1123 Old Columbus Rd.
Wooster, OH 44691

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1123 Old Columbus Rd.
Wooster, Ohio**

Description of proposed emissions unit(s):
Gas engine, digester heat exchanger, waste heat exchanger.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described 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

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting 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. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

City of Wooster WPCP
PTI Application: 02-19183
Issued: 4/29/2004

Facility ID: 0285030411

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. 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 this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	0.65
SO ₂	21.86
NO _x	12.58
CO	21.25
OC	4.97

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - 3.92 mmBtu/hr Waukesha Model VGF24GLD generator, fueled by digester gas or natural gas	OAC rule 3745-31-05(A)(3)	0.13 lb/hr and 0.56 TPY of particulate emissions (PE)
		4.50 lbs/hr and 19.71 TPY of sulfur dioxides (SO ₂)
		2.57 lbs/hr and 11.26 TPY of nitrogen oxides (NO _x)
		3.21 lbs/hr and 14.07 TPY of carbon monoxide (CO)
		0.51 lb/hr and 2.25 TPY of organic compounds (OC)
	OAC rule 3745-17-11(B)(5)	Visible emissions from this emissions unit shall not exceed 5% opacity, as a six-minute average. The emission limitation specified in this rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible emission limitation specified in this rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).

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City of

PTI A

Issued: 4/29/2004

Emissions Unit ID: **P001**

2. Additional Terms and Conditions

- 2.a The annual emission limitations specified above are based upon this emissions units potential to emit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these limits.

B. Operational Restrictions

1. The permittee shall burn only natural gas or digester gas in this emissions unit.
2. The hydrogen sulfide content of the fuel burned shall not exceed 3,400 ppm.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor hydrogen sulfide weekly, by using the Draeger or Gastec tubes detection methods. The reliability rating of the Draeger or Gastec tubes is +/- 25%. Therefore, to ensure compliance with a hydrogen sulfide concentration of 3,400 ppm, hydrogen sulfide readings on the Draeger or Gastec tube shall not exceed 2,550 ppm.

The permittee shall maintain records of the hydrogen sulfide concentration in ppm for each weekly test.

2. The permittee shall maintain records of type(s) of fuel(s) burned in this emissions unit each day.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports identifying any day which a fuel other than natural gas or digester gas was burned in this emissions unit.
2. The permittee shall submit deviation (excursion) reports identifying any days which the hydrogen sulfide content of the fuel burned exceeded the level specified in section B.2.

E. Testing Requirements

1. Compliance with the emission limitations specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitations:
0.13 lb/hr and 0.56 TPY of PE

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City of

PTI A

Issued: 4/29/2004

Emissions Unit ID: **P001**

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the manufacturer supplied emission factor of 0.1 g/bhp-hr.

- 1.b Emission Limitations:
4.50 lbs/hr and 19.71 TPY of SO₂

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the manufacturer supplied emission factor of 3.5 g/bhp-hr.

- 1.c Emission Limitations:
2.57 lbs/hr and 11.26 TPY of NO_x

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the manufacturer supplied emission factor of 2.0 g/bhp-hr.

- 1.d Emission Limitations:
3.21 lbs/hr and 14.07 TPY of CO

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the manufacturer supplied emission factor of 2.5 g/bhp-hr.

- 1.e Emission Limitations:
0.51 lb/hr and 2.25 TPY of OC

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the manufacturer supplied emission factor of 0.4 g/bhp-hr.

- 1.f Emission Limitation:
Visible emissions from this emissions unit shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - emergency digester gas flare	OAC rule 3745-31-05(A)(3)	0.02 lb/hr and 0.09 TPY of particulate emissions (PE) 0.49 lb/hr and 2.15 TPY of sulfur dioxides (SO ₂) 0.30 lbs/hr and 1.32 TPY of nitrogen oxides (NO _x) 1.64 lbs/hr and 7.18 TPY of carbon monoxide (CO) 0.62 lb/hr and 2.72 TPY of organic compounds (OC) Visible emissions from this emissions unit shall not exceed 5% opacity, as a six-minute average.

2. **Additional Terms and Conditions**

- 2.a The annual emission limitations specified above are based upon this emissions units potential to emit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these limits.

B. Operational Restrictions

1. The permittee shall burn only natural gas or digester gas in this emissions unit.
2. The hydrogen sulfide content of the fuel burned shall not exceed 3,400 ppm.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor hydrogen sulfide weekly, by using the Draeger or Gastec tubes detection methods. The reliability rating of the Draeger or Gastec tubes is +/- 25%. Therefore, to ensure compliance with a hydrogen sulfide concentration of 3,400 ppm, hydrogen sulfide readings on the Draeger or Gastec tube shall not exceed 2,550 ppm.

The permittee shall maintain records of the hydrogen sulfide concentration in ppm for each weekly test.

2. The permittee shall maintain records of type(s) of fuel(s) burned in this emissions unit each day.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports identifying any day which a fuel other than natural gas or digester gas was burned in this emissions unit.
2. The permittee shall submit deviation (excursion) reports identifying any days which the hydrogen sulfide content of the fuel burned exceeded the level specified in section B.2.

E. Testing Requirements

1. Compliance with the emission limitations specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitations:
0.02 lb/hr and 0.09 TPY of PE

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the emission factor of 40 micrograms/liter in Table 13.5-1 of AP-42 Compilation of Air Pollutant Emission Factors, Chapter 13 entitled "Industrial Flares," dated 5/95. This factor for lightly smoking flares was chosen to be conservative. No visible emissions are expected to be present.

- 1.b Emission Limitations:
0.49 lb/hr and 2.15 TPY of SO₂

City of Wooster WPCP
PTI Application: 02 10102
Issued

Facility ID: 0285030411

Emissions Unit ID: **P002**

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the equation listed in OAC rule 3745-18-04(F)(3).

- 1.c Emission Limitations:
0.30 lbs/hr and 1.32 TPY of NO_x

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the emission factor of 0.068 lb/mmBtu in Table 13.5-1 of AP-42 Compilation of Air Pollutant Emission Factors, Chapter 13 entitled "Industrial Flares," dated 5/95.

- 1.d Emission Limitations:
1.64 lbs/hr and 7.18 TPY of CO

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the emission factor of 0.37 lb/mmBtu in Table 13.5-1 of AP-42 Compilation of Air Pollutant Emission Factors, Chapter 13 entitled "Industrial Flares," dated 5/95.

- 1.e Emission Limitations:
0.62 lb/hr and 2.72 TPY of OC

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using the emission factor of 0.14 lb/mmBtu in Table 13.5-1 of AP-42 Compilation of Air Pollutant Emission Factors, Chapter 13 entitled "Industrial Flares," dated 5/95.

- 1.f Emission Limitation:
Visible emissions from this emissions unit shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

F. Miscellaneous Requirements

None