



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
CUYAHOGA COUNTY
Application No: 13-03969**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
40 CFR Part 60 Subpart Dc	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 4/25/2002

Cleveland Clinic Foundation
Ron Lawson
9500 Euclid Avenue
Cleveland, OH 44195

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
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA

CBAPC



**Permit To Install
Terms and Conditions**

**Issue Date: 4/25/2002
Effective Date: 4/25/2002**

FINAL PERMIT TO INSTALL 13-03969

Application Number: 13-03969
APS Premise Number: 1318004311
Permit Fee: **\$800**
Name of Facility: Cleveland Clinic Foundation
Person to Contact: Ron Lawson
Address: 9500 Euclid Avenue
Cleveland, OH 44195

Location of proposed air contaminant source(s) [emissions unit(s)]:
**9500 Euclid Avenue
Cleveland, Ohio**

Description of proposed emissions unit(s):
CCF Hotel Services; two 13.4 mmbtu/hr natrual gas fired boilers.

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 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. 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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 thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

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>
PE	2.36
NOx	5.78
CO	9.64
OC	1.22
SO2	0.06

B. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. Pursuant to 40 CFR Part 60 Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted each day.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

a. Emission Limitation -

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

b. Emission Limitation -

0.020 lb/mmBtu of particulate emissions, and 1.18 TPY

Applicable Compliance Method -

Compliance with the lb/mmBtu limitation shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0134 mmcu.ft/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for particulates (7.6 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (13.4 mmBtu/hr).

The TPY emission rate will be based on multiplying the above lb/mmBtu emission rate by the maximum hourly heat input capacity of the emissions unit (13.4 mmBtu/hr), the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

c. Emission Limitation -

0.66 lb/hr of NO_x emissions, and 2.89 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-1(7/98) emission factor for NO_x (50 lb/mm³cu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

d. Emission Limitation -

1.10 lbs/hr of CO emissions, and 4.82 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-1(7/98) emission factor for CO (84 lb/mm³cu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

e. Emission Limitation -

0.14 lb/hr of OC emissions, and 0.61 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for OC (11 lb/mm³cu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

f. Emission Limitation -

0.007 lb/hr of SO2 emissions, and 0.03 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for SO2 (0.6 lb/mmCu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

F. Miscellaneous Requirements

- 1. The following source is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
B007	13.4 mmBtu/hr natural gas fired boiler for hot water	Subpart Dc

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
 DAPC - Air Quality Modeling and Planning
 P.O. Box 1049
 Columbus, OH 43216-1049

and

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Cleveland Clinic Foundation

PTI Application: 13-03969

Issued: 4/25/2002

Facility ID: 1318004311

Emissions Unit ID: B007

Cleveland Bureau of Air Pollution Control
1925 St. Clair Ave.
Cleveland, Ohio 44114

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>
B008 - 13.4 mmBtu/hr natural gas fired boiler for hot water	OAC rule 3745-31-05(A)(3)	0.66 lb/hr NOx emissions, and 2.89 TPY 1.10 lb/hr CO emissions, and 4.82 TPY 0.14 lb/hr OC emissions, and 0.61 TPY 0.007 lb/hr SO2 emissions, and 0.03 TPY Particulate emissions, 1.18 TPY The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-10(B)(1).
	OAC rule 3745-17-10(B)(1)	0.02 lb/mmBtu of particulate emissions
	OAC rules 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule
	40 CFR Part 60 Subpart Dc	No emission limitation for natural gas but still an applicable rule.

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. Pursuant to 40 CFR Part 60 Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted each day.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following methods(s):

a. Emission Limitation -

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9.

b. Emission Limitation -

0.020 lb/mmBtu of particulate emissions, and 1.18 TPY

Applicable Compliance Method -

Compliance with the lb/mmBtu limitation shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0134 mmcu.ft/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for particulates(7.6 lbs/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (13.4 mmBtu/hr).

The TPY emission rate will be based on multiplying the above lb/mmBtu emission rate by the maximum hourly heat input capacity of the emissions unit (13.4 mmBtu/hr), the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

c. Emission Limitation -

0.66 lb/hr of NO_x emissions, and 2.89 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-1(7/98) emission factor for NO_x (50 lb/mm³cu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

d. Emission Limitation -

1.10 lbs/hr of CO emissions, and 4.82 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-1(7/98) emission factor for CO (84 lb/mm³cu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

e. Emission Limitation -

0.14 lb/hr of OC emissions, and 0.61 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-1(7/98) emission factor for OC (11 lb/mm³cu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

f. Emission Limitation -

0.007 lb/hr of SO2 emissions, and 0.03 TPY

Applicable Compliance Method -

Compliance with the hourly emission limit shall be determined by multiplying the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for SO2 (0.6 lb/mmCu.ft) by the maximum hourly heat input capacity (13.4 mmBtu/hr) of the emissions unit and the heating value for natural gas (cu.ft/1020 Btu).

The TPY emission rate will be based on multiplying the above lb/hr emission rate by the annual operating hours of the emissions unit and the factor (1.0 ton/2000 lbs).

F. Miscellaneous Requirements

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<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation (Subpart)</u>
B008	13.4 mmBtu/hr natural gas fired boiler for hot water	Subpart Dc

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
c. actual start-up date (within 15 days after such date); and
d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

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Columbus, OH 43216-1049

and

Cleveland Bureau of Air Pollution Control
1925 St. Clair Ave.

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Cleveland Clinic Foundation

PTI Application: 13-03969

Issued: 4/25/2002

Facility ID: 1318004311

Emissions Unit ID: B008

Cleveland, Ohio 44114