

7945

G-000-104.252

**PERMIT TO INSTALL APPLICATION FOR THREE 10.5 MM BTU/HR  
NATURAL GAS-/ OIL- FIRED BOILERS; FEMP ID NO. 10-007  
(OEPA) PREMISE NO. 1431110128**

01/08/97

**C:FCDP:96-0002  
FDF HAMILTON COUNTY  
30  
PTI**

Fernald Environmental



Restoration Management Corporation

P. O. Box 538704 Cincinnati, Ohio 45253-8704 (513) 648-3000

January 8, 1997

Fernald Environmental Management Project  
Letter No. C:FCDP:96-0002

Mr. Peter Sturdevant, Compliance Specialist  
Air Quality Management,  
Hamilton County Department of Environmental Services  
1632 Central Parkway  
Cincinnati, Ohio 45210

Dear Mr. Sturdevant:

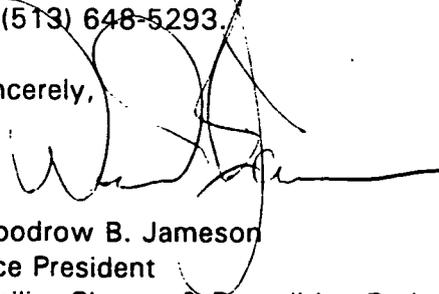
**PERMIT TO INSTALL APPLICATION FOR THREE 10.5 MM BTU/HR NATURAL GAS-/OIL-FIRED BOILERS; FEMP ID NO. 10-007 (OEPA) PREMISE NO. 1431110128**

Enclosed is a Permit to Install application for three 10.5 MM btu Natural Gas-/Oil-Fired Boilers identified as B010, B011, and B012. This PTI application is for the use of three small fuel oil fired boilers during emergency curtailment of natural gas usage by CG&E.

These sources are subject to 40 CFR Part 60 Standards of Performance for New Stationary Sources for Small Industrial-Commercial-Institutional Steam Generating Units (NSPS) and will comply with all requirements of the NSPS. The following administrative controls will be utilized to create a Synthetic Minor and to prevent the triggering of PSD requirements. These boilers would be used only when B006 can not be utilized during a natural gas curtailment. The use of these sources will be offset by allowable emissions from B006 and would not cause an increase in emissions from the facility.

If you have any questions concerning this application, please contact Ervin Fisher of my staff at (513) 648-5293.

Sincerely,



Woodrow B. Jameson  
Vice President  
Facility Closure & Demolition Projects

WBJ:EF:mhv  
Enclosure

**000001**



Mr. Peter Sturdevant  
Letter No. C:FCDP:96-0002  
Page 2

c: With Enclosure

R. M. Nichols, FDF/MS44  
M. W. Page, FDF/MS44  
E. P. Skintik, DOE-FEMP/MS45  
AR Coordinator/MS78  
File Record Storage Copy 102.1  
PSI Files

Without Enclosure

S. M. Beckman, FDF/MS52-3  
S. L. Blankenship, FDF/MS60  
L. C. Goidell, FDF/MS65-2  
W. J. Naber, FDF/MS75  
P. B. Spotts, FDF/MS65-2  
W. E. Pasko, DOE-FEMP/MS45

000002

**ATTACHMENT I  
ADDITIONAL INFORMATION  
AS REQUIRED BY NSPS AND PSD**

**I. NEW SOURCE PERFORMANCE STANDARDS (NSPS)**

1. These sources are classified as small industrial steam generating units which have a maximum btu rating between 10 MM btu and 100 MM btu.
2. These sources will utilize No. 2 diesel as their primary fuel source and will have the capability of burning Natural gas as an alternate fuel source.
3. A specification sheet for the No. 2 diesel that may be burned in these sources is attached. Records will be maintained showing actual fuel usage.

**II. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REVIEW**

1. These sources have the potential of triggering the requirements of PSD if they are operated after No. 6 Boiler is permitted and retrofitted to burn No. 2 Fuel oil.
2. These sources will be operated in such a manner that they will not trigger PSD requirements. This will be accomplished by not operating the boilers concurrently with NO. 6 Boiler.

Pollutant Name	Hourly Emission (lb/hr) (10.5 MM btu) 3 boilers	Proposed Hourly Emission (lb/hr) (100 MM btu) boiler	Yearly Emission (Tons/yr) (10.5 MM btu) 3 boilers	Yearly Emission (Tons/yr) (100 MM btu) boilers	Annual net increase in emissions from operating 3 (10.5 MM btu) boilers
<b>NATURAL GAS USAGE</b>					
Particulate	0.19	0.6	0.84	2.63	(1.79)
SO <sub>2</sub>	0.02	0.06	0.08	0.26	(0.18)
NO <sub>x</sub>	3.15	10.0	13.8	43.8	(30.0)
CO	1.89	6.0	8.28	26.28	(18.0)
VOC	0.19	0.6	0.84	2.63	(1.79)
<b>FUEL OIL USAGE<sup>1</sup></b>					
Particulate	0.45	1.43	1.97	1.88	0.09
SO <sub>2</sub>	9.57	30.4	41.94	39.94	2.0
NO <sub>x</sub>	4.41	14.0	19.32	18.75	0.57
CO	1.26	4.0	5.52	4.69	0.83
VOC	0.05	0.14	0.19	0.2	(0.01)

<sup>1</sup> 100 MM btu boiler's yearly emissions based on limit of 1,885,000 gal.) **000003**

**OHIO ENVIRONMENTAL PROTECTION AGENCY**  
**APPLICATION FOR PERMIT TO INSTALL**

FOR OFFICE USE ONLY

7945

Read all instructions carefully prior to filling out this application (See the line-by-line instructions on page 3). Please also be aware that it may take 2 to 6 months or more to obtain a final permit to install. Construction of a new source cannot begin until a final permit to install is obtained.

PTI No. \_\_\_\_\_  
Date Received \_\_\_\_\_

U. S. Department of Energy  
1 Applicant Name  
Fernald Environmental Management Project  
2 Facility Name  
7400 Willey Road  
3 Facility Address (Street)  
Fernald  
City/Township  
Hamilton 45030  
5 County 6 Zip Code  
1431110128  
7 OEPA Air Facility ID# (10-digit)  
4953  
8 Facility Primary Standard Industrial Code

Lewis C. Goidell  
9 Primary Facility Contact  
(513) 648-4124  
10 Contact Phone Number  
P.O. Box 538704  
11 Contact Mailing Address (Street)  
MS65-2  
12 Mail Drop/Attention (if applicable)  
Cincinnati OH  
13 City/Township 14 State  
45253-8704  
15 Zip Code

This facility is located west of the former production area of the Department of Energy  
16 Description of the Proposed Location of the Facility

Fernald Environmental Management Project (FEMP) and north of the AWWT Facility.

Boiler Units B010, B011, and B012  
17 Name of new or modified source or facility

Steam for Space Heating and Process Usage  
18 Product of new or modified source/facility

*Under OAC 3745-31-04, these signatures shall constitute personal affirmation that all statements or assertions of fact made in the application are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.*

[Signature]  
19 Authorized Signature (for facility)

Date: 1/8/97

Vice President Facilities Closure & Demolition Projects  
20 Title

P.O. Box 538704, Cincinnati, OH 45253-8704  
21 Address (Street, City/Township, State and Zip Code)

For Wastewater Treatment Plants complete the following.

Date:  
22 Signature of General Contractor or Agent performing installation, if selected.

23 Company

24 Address (Street, City/Township, State and Zip Code)

000004

Specific Emissions Unit Information Form

One copy of this form should be filled out for each air pollution emissions unit covered by this permit to install application. Instructions for this form can be found starting on page 15 of the permit to install application.

- 25. OEPA Emissions Unit ID (4 digit number):   B010
- 26. Company ID for Emissions Unit:   FEMP ID 10-014
- 27. Emissions Unit Activity Description:   Gas-/Oil-Fired 10.5 MM btu/hr Boiler for steam generation.
- 28. Equipment Description:   10.5 MM btu/hr Gas-/oil- Fired Boiler
- 29. Construction/Modification/Emissions Testing Schedule
 

	DATE
Equipment Ordered (month/year)- - - - -	TBD
Commence Construction Date (month/year) - - -	TBD
Initial Startup Date (month/year) - - - - -	TBD
Most Recent Modification Date (if applicable) (as defined in OAC rule 3745-31-01(j)):	N/A
Performance Testing - - - - -	N/A

30. Emissions Information:

Complete the following table for each criteria air pollutant proposed to be emitted from the emissions unit at a rate greater than one ton/year (list each pollutant on a separate line), and for any pollutant for which an emissions limit has been established (per a state or federal regulation or Permit to Install) which limits air emissions of the pollutant to less than one ton/year.

Pollutant Name	Proposed Maximum Hourly Emission (lb/hr)	Proposed Maximum Yearly Emission (Tons/year)
Particulate (Gas)	0.063 lbs/hr	0.28 Tons/year
SO <sub>2</sub> (Gas)	0.006 lbs/hr	0.026 Tons/year
NO <sub>x</sub> (Gas)	1.05 lbs/hr	4.6 Tons/year
CO (Gas)	0.63 lbs/hr	2.76 Tons/year
VOC (Gas)	0.063 lbs/hr	0.28 Tons/year
Particulate (Oil)	0.15 lbs/hr	0.657 Tons/year
SO <sub>2</sub> (Oil)	3.19 lbs/hr	13.98 Tons/year
NO <sub>x</sub> (Oil)	1.47 lbs/hr	6.439 Tons/year
CO (Oil)	0.42 lbs/hr	1.84 Tons/year
VOC (Oil)	0.015 lbs/hr	0.066 Tons/year

(If additional pollutants need to be identified, copy this page and attach the additional pages. Check here  if additional copies of this page are attached.)

31. Proposed Operating Schedule:

	Hours Per Day	Hours per Year
Average	24	8760
Maximum	24	8760

32. Add-on Control Equipment Information:

Does this emissions unit employ add-on emissions control equipment?  yes  no  
 If your answer is yes, then fill out the table below. If your answer is no, then proceed to item # 33.

Control Equipment Type Codes:

- A. Fabric filter/Baghouse
- B. Electrostatic Precipitator
- C. Catalytic Incinerator
- D. Thermal Incinerator
- E. Flare
- F. Wet Scrubber
- G. Condenser
- H. Carbon Adsorber
- I. Concentrator
- J. Cyclone/Multiclone
- K. Settling Chamber
- L. Other, describe \_\_\_\_\_

Item	Control Device #1	Control Device #2	Control Device #3
Type (See Above Codes)			
Configuration			
Manufacturer's Name			
Company ID			
Month/Year Installed			
Pollutant(s) Controlled			
Average Design Control Efficiency(%)			
Operating Control Efficiency(%)			
Inlet Gas Flow (acfm)			
Inlet Gas Temperature (°F)			
Maximum Controlled Emission Rate for Each Pollutant controlled (lb/hr, grain/dscf or ppmv)			

Supplemental control device information (see instructions)

Control Device #1 \_\_\_\_\_

Control Device #2 \_\_\_\_\_

Control Device #3 \_\_\_\_\_

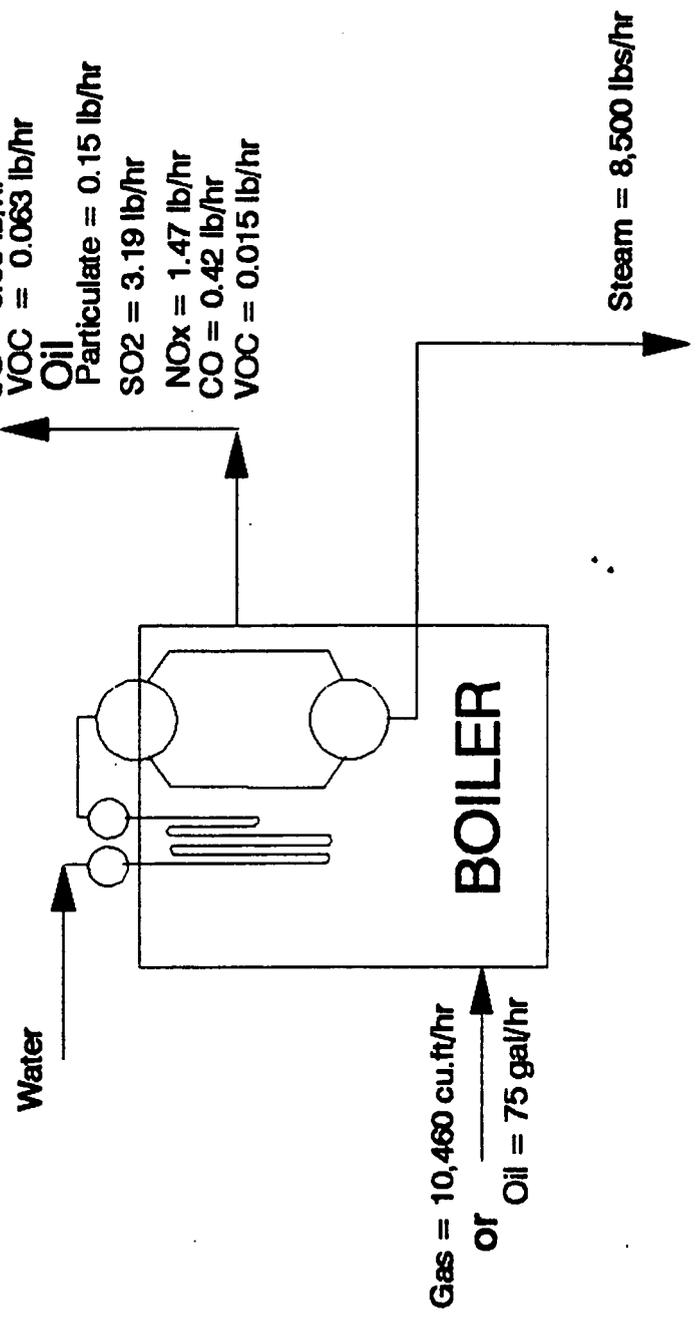
33. Attach a Process or Activity Flow Diagram to this application for each emissions unit included in the application. Please see the instructions on page xx.

Process Flow Diagram attached.

# PROCESS FLOW DIAGRAM EU-B010-96 BOILER B010

**GAS**  
 Particulate = 0.063 lb/hr  
 SO<sub>2</sub> = 0.006 lb/hr  
 NO<sub>x</sub> = 1.05 lb/hr  
 CO = 0.63 lb/hr  
 VOC = 0.063 lb/hr

**Oil**  
 Particulate = 0.15 lb/hr  
 SO<sub>2</sub> = 3.19 lb/hr  
 NO<sub>x</sub> = 1.47 lb/hr  
 CO = 0.42 lb/hr  
 VOC = 0.015 lb/hr



12-19-96  
EF

34. Emissions egress point(s) information: (Provide the following information for each point at which emissions are released into the ambient air from the emissions unit list each and individual egress point on a separate line):

Egress point description codes:

- A. vertical stack (unobstructed)
- B. horizontal/downward stack

- C. vertical stack (obstructed)
- D. fugitive

Company ID for Egress Point	Description Code
EP-B010-01	A

35. Are you are applying, per OAC rule 3745-35-07, for federally enforceable limits as part of this permit issuance?  yes  no

36. Are you requesting any information included in this application for this emissions unit is being claimed as a trade secret per Ohio Revised Code (ORC) 3704.08?  yes  no

Emission Calculations for: PERMIT TO INSTALL

Facility: Fernald Environmental Management Project Computed by: Ervin Fisher  
 Source No: 1431110128 B010 Date: December 20, 1996  
 Source ID: FEMP ID NO. 10-014

## I. Emission Estimates:

Boiler rating (maximum heat input): 10.5 (MM btu/hour).

Annual operating hours: 8760 hours/year.

Emission factors: (given as lbs/MM cf gas burned)

particulate: 13.7, SO<sub>2</sub>: 0.6, NO<sub>x</sub>: 81.0, CO: 61.0, VOC: 3.0

Emission factor reference: AP-42, tables 1.4-1, 1.4-2 and 1.4-3

## 1. Actual emissions: (heat input basis)

Particulate:  $13.7 \text{ (lbs/MM cf)} / 1050.0 \text{ (btu/cf)} = 0.013 \text{ (lbs/MM btu)}$

SO<sub>2</sub>:  $0.6 \text{ (lbs/MM cf)} / 1050.0 \text{ (btu/cf)} = 0.0006 \text{ (lbs/MM btu)}$

## 2. Annual actual and potential: 8760 (hrs/year) emission in (tons/year).

## Particulates:

ACTUAL:  $13.7 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.63 \text{ TPY}$

POTENTIAL:  $13.7 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.63 \text{ TPY}$

SO<sub>2</sub>:

ACTUAL:  $0.6 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.026 \text{ TPY}$

POTENTIAL:  $0.6 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.026 \text{ TPY}$

NO<sub>x</sub>:

ACTUAL:  $81.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 3.55 \text{ TPY}$

POTENTIAL:  $81.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 3.55 \text{ TPY}$

## CO:

ACTUAL:  $61.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 2.67 \text{ TPY}$

POTENTIAL:  $61.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 2.67 \text{ TPY}$

## VOC:

ACTUAL:  $3.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.13 \text{ TPY}$

POTENTIAL:  $3.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.13 \text{ TPY}$

Emission Calculations for: PERMIT TO INSTALL

Facility: Fernald Environmental Management Project Computed by: Ervin Fisher  
 Source No: 1431110128 B010 Date: December 20, 1996  
 Source ID: FEMP ID NO. 10-014

## I. Emission Estimates:

Boiler rating (maximum heat input): 10.5 (MM btu/hour).  
 Annual operating hours: 8760 hours/year.  
 Emission factors: (given as lbs/1000 gal. fuel burned)  
 particulate: 2.0, SO<sub>2</sub>: 42.6, NOx: 20.0, CO: 5.0, VOC: 0.052  
 Emission factor reference: AP-42, tables 1.3-2 and 1.3-3.

## 1. Actual emissions: (heat input basis)

Particulate: 2.0 (lbs/Mgal) / 140000 (btu/gal) = 0.0143 (lbs/MM btu)

SO<sub>2</sub>: 42.6 (lbs/Mgal) / 140000 (btu/gal) = 0.304 (lbs/MM btu)

## 2. Annual actual and potential: 8760 (hrs/year) emission in (tons/year).

## Particulates:

ACTUAL: 2.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 0.66 TPY

POTENTIAL: 2.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 0.66 TPY

SO<sub>2</sub>:

ACTUAL: 42.6 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 13.99 TPY

POTENTIAL: 42.6 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 13.99 TPY

## NOx:

ACTUAL: 20.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 6.57 TPY

POTENTIAL: 20.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 6.57 TPY

## CO:

ACTUAL: 5.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 1.64 TPY

POTENTIAL: 5.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000  
 (btu/gal)/2000 (lbs/ton) = 1.64 TPY

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DATE APPLICATION RECEIVED: \_\_\_\_\_

FACILITY ID: \_\_\_\_\_

## EMISSIONS ACTIVITY CATEGORY FORM FUEL BURNING OPERATION

OEPA EMISSIONS UNIT ID   B010   (if established)

1. Input capacities (million btu/hr): Rated:   10.5   Note: Indicate units if different  
 Maximum:   10.5    
 Normal:   10.5
- Output capacities (lbs steam/hr): Rated:   8,500    
 Maximum:   8,500    
 Normal:   8,500

Note: Only provide output capacities for steam producing operations.

2. Percent used for: Space heat   80  % Process   20  % Power   -0-  %
3. Type of fuel fired (check one or more):  coal  oil  natural gas  
 wood  LPG  other (specify) \_\_\_\_\_
4. Type of draft (check one):  natural  induced  forced
5. Type of combustion monitoring (check one or more):  
 fuel/air ratio  oxygen  opacity  
 other (describe) \_\_\_\_\_

### COAL-FIRED UNITS

6. Type of coal firing (check one):  hand-fired  underfeed stoker   
 traveling grate  chain grate  spreader stoker   
 cyclones  pulverized-dry bottom  pulverized-wet bottom  
 other (describe) \_\_\_\_\_
7. Fly ash reinjection (check one):  yes  no

### OIL-FIRED UNITS

8. Type of oil (check one or more):  no. 2  no. 6  
 other (describe) \_\_\_\_\_
9. Type of atomization (check one or more):  oil pressure  steam pressure  
 compressed air  rotary cup  
 other (describe) \_\_\_\_\_
10. Oil preheater (check one):  yes  no If yes, indicate temperature  
                   °F

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 DATE APPLICATION RECEIVED: \_\_\_\_\_  
 FACILITY ID: \_\_\_\_\_

11. Complete the following table for fuels identified in item 3:

Fuel	Heat Content (BTU/unit)	%	%	Fuel Usage		
				Estimated Maximum Per Year	Normal Per Hr.	Max. Per Hr.
Coal	BTU/lb			tons	lbs	lbs
Gas	1050 BTU/cu ft	N/A	N/A	759 MM cu ft	57,143 cu ft	95,238.1 cu ft
Oil	140M BTU/gal	0.01	0.3	1,873 Mgal	428.6 gal	714.29 gal
Wood	BTU/lb			tons	lbs	lbs
LPG	BTU/gal			gal	gal	gal
Other						

Specific Emissions Unit Information Form

One copy of this form should be filled out for each air pollution emissions unit covered by this permit to install application. Instructions for this form can be found starting on page 15 of the permit to install application.

- 25. OEPA Emissions Unit ID (4 digit number):   B011
- 26. Company ID for Emissions Unit:   FEMP ID 10-015
- 27. Emissions Unit Activity Description:   Gas-/Oil-Fired 10.5 MM btu/hr Boiler for steam generation.
- 28. Equipment Description:   10.5 MM btu/hr Gas-/Oil-Fired Boiler

- 29. Construction/Modification/Emissions Testing Schedule
- |  | DATE |
|--|------|
| Equipment Ordered (month/year) - - - - -   | TBD  |
| Commence Construction Date (month/year) - - -  | TBD  |
| Initial Startup Date (month/year) - - - - -  | TBD  |
| Most Recent Modification Date (if applicable)<br>(as defined in OAC rule 3745-31-01(j)): | N/A  |
| Performance Testing - - - - -  | N/A  |

30. Emissions Information:

Complete the following table for each criteria air pollutant proposed to be emitted from the emissions unit at a rate greater than one ton/year (list each pollutant on a separate line), and for any pollutant for which an emissions limit has been established (per a state or federal regulation or Permit to Install) which limits air emissions of the pollutant to less than one ton/year.

Pollutant Name	Proposed Maximum Hourly Emission (lb/hr)	Proposed Maximum Yearly Emission (Tons/year)
Particulate (Gas)	0.063 lbs/hr	0.28 Tons/year
SO <sub>2</sub> (Gas)	0.006 lbs/hr	0.026 Tons/year
NO <sub>x</sub> (Gas)	1.05 lbs/hr	4.6 Tons/year
CO (Gas)	0.63 lbs/hr	2.76 Tons/year
VOC (Gas)	0.063 lbs/hr	0.28 Tons/year
Particulate (Oil)	0.15 lbs/hr	0.657 Tons/year
SO <sub>2</sub> (Oil)	3.19 lbs/hr	13.98 Tons/year
NO <sub>x</sub> (Oil)	1.47 lbs/hr	6.439 Tons/year
CO (Oil)	0.42 lbs/hr	1.84 Tons/year
VOC (Oil)	0.015 lbs/hr	0.066 Tons/year

(If additional pollutants need to be identified, copy this page and attach the additional pages. Check here  if additional copies of this page are attached.)

31. Proposed Operating Schedule:

	Hours Per Day	Hours per Year
Average	24	8760
Maximum	24	8760

060013

32. Add-on Control Equipment Information:

Does this emissions unit employ add-on emissions control equipment?  yes  no  
 If your answer is yes, then fill out the table below. If your answer is no, then proceed to item # 33.

Control Equipment Type Codes:

- A. Fabric filter/Baghouse
- B. Electrostatic Precipitator
- C. Catalytic Incinerator
- D. Thermal Incinerator
- E. Flare
- F. Wet Scrubber
- G. Condenser
- H. Carbon Adsorber
- I. Concentrator
- J. Cyclone/Multiclone
- K. Settling Chamber
- L. Other, describe \_\_\_\_\_

Item	Control Device #1	Control Device #2	Control Device #3
Type (See Above Codes)			
Configuration			
Manufacturer's Name			
Company ID			
Month/Year Installed			
Pollutant(s) Controlled			
Average Design Control Efficiency(%)			
Operating Control Efficiency(%)			
Inlet Gas Flow (acfm)			
Inlet Gas Temperature (°F)			
Maximum Controlled Emission Rate for Each Pollutant controlled (lb/hr, grain/dscf or ppmv)			

Supplemental control device information (see instructions)

Control Device #1 \_\_\_\_\_

Control Device #2 \_\_\_\_\_

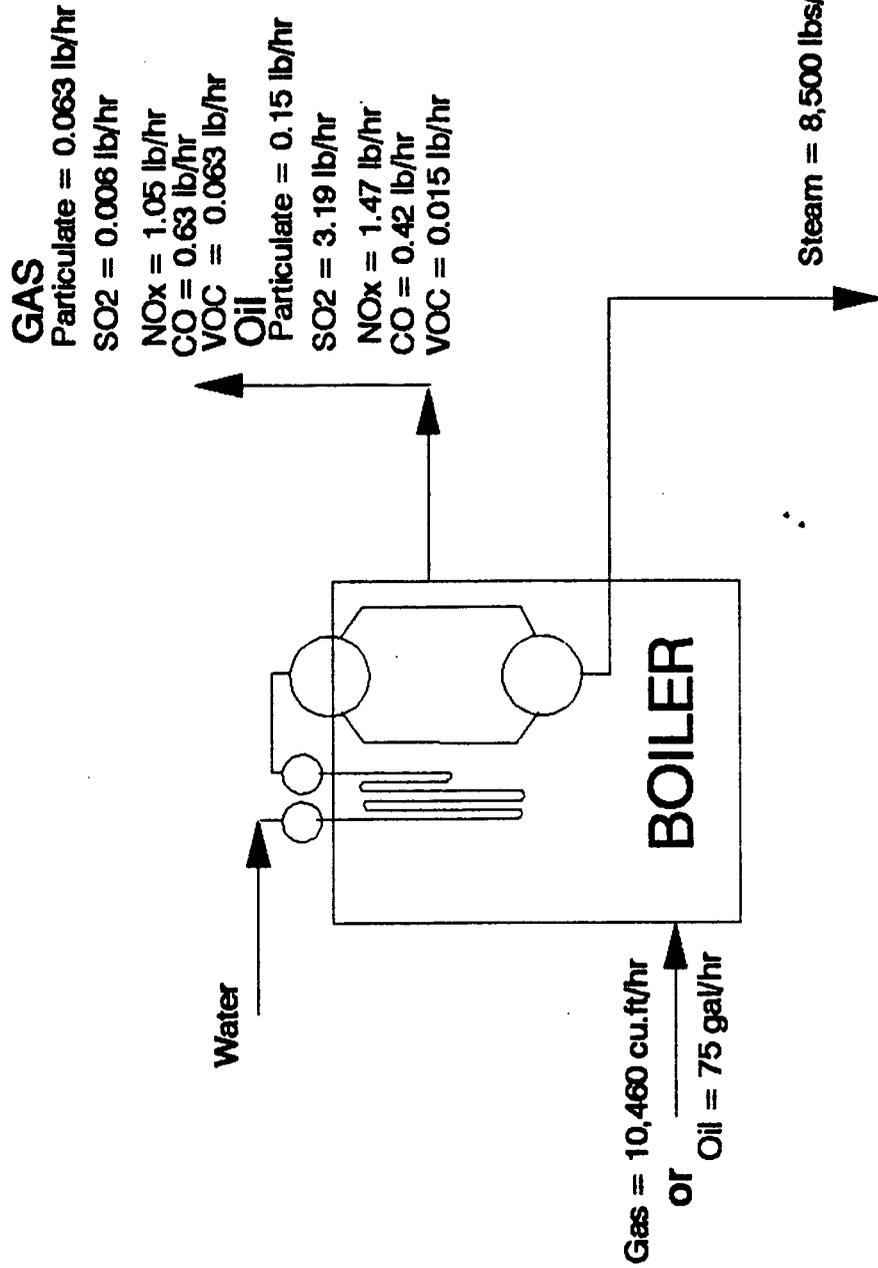
Control Device #3 \_\_\_\_\_

33. Attach a Process or Activity Flow Diagram to this application for each emissions unit included in the application. Please see the instructions on page xx.

Process Flow Diagram attached.

# PROCESS FLOW DIAGRAM

## EU-B011-96 BOILER B011



12-19-96  
EF

34. Emissions egress point(s) information: (Provide the following information for each point at which emissions are released into the ambient air from the emissions unit list each and individual egress point on a separate line):

- Egress point description codes:
- A. vertical stack (unobstructed)
  - B. horizontal/downward stack
  - C. vertical stack (obstructed)
  - D. fugitive

Company ID for Egress Point	Description Code
EP-B011-01	A

35. Are you are applying, per OAC rule 3745-35-07, for federally enforceable limits as part of this permit issuance?  yes     no
36. Are you requesting any information included in this application for this emissions unit is being claimed as a trade secret per Ohio Revised Code (ORC) 3704.08?  yes     no

FOR OHIO EPA USE ONLY  
 DATE APPLICATION RECEIVED: \_\_\_\_\_  
 FACILITY ID: \_\_\_\_\_

Emission Calculations for: PERMIT TO INSTALL

Facility: Fernald Environmental Management Project Computed by: Ervin Fisher  
 Source No: 1431110128 B011 Date: December 20, 1996  
 Source ID: FEMP ID NO. 10-015

I. Emission Estimates:

Boiler rating (maximum heat input): 10.5 (MM btu/hour).  
 Annual operating hours: 8760 hours/year.  
 Emission factors: (given as lbs/MM cf gas burned)  
 particulate: 13.7, SO<sub>2</sub>: 0.6, NOx: 81.0, CO: 61.0, VOC: 3.0  
 Emission factor reference: AP-42, tables 1.4-1, 1.4-2 and 1.4-3

1. Actual emissions: (heat input basis)

Particulate:  $13.7 \text{ (lbs/MM cf)} / 1050.0 \text{ (btu/cf)} = 0.013 \text{ (lbs/MM btu)}$   
 SO<sub>2</sub>:  $0.6 \text{ (lbs/MM cf)} / 1050.0 \text{ (btu/cf)} = 0.0006 \text{ (lbs/MM btu)}$

2. Annual actual and potential: 8760 (hrs/year) emission in (tons/year).

Particulates:

ACTUAL:  $13.7 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.63 \text{ TPY}$

POTENTIAL:  $13.7 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.63 \text{ TPY}$

SO<sub>2</sub>:

ACTUAL:  $0.6 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.026 \text{ TPY}$

POTENTIAL:  $0.6 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.026 \text{ TPY}$

NOx:

ACTUAL:  $81.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 3.55 \text{ TPY}$

POTENTIAL:  $81.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 3.55 \text{ TPY}$

CO:

ACTUAL:  $61.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 2.67 \text{ TPY}$

POTENTIAL:  $61.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 2.67 \text{ TPY}$

VOC:

ACTUAL:  $3.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.13 \text{ TPY}$

POTENTIAL:  $3.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.13 \text{ TPY}$

FOR OHIO EPA USE ONLY  
 DATE APPLICATION RECEIVED: \_\_\_\_\_  
 FACILITY ID: \_\_\_\_\_

Emission Calculations for: PERMIT TO INSTALL

Facility: Fernald Environmental Management Project Computed by: Ervin Fisher  
 Source No: 1431110128 B011 Date: December 20, 1996  
 Source ID: FEMP ID NO. 10-015

I. Emission Estimates:

Boiler rating (maximum heat input): 10.5 (MM btu/hour).  
 Annual operating hours: 8760 hours/year.  
 Emission factors: (given as lbs/1000 gal. fuel burned)  
 particulate: 2.0, SO<sub>2</sub>: 42.6, NOx: 20.0, CO: 5.0, VOC: 0.052  
 Emission factor reference: AP-42, tables 1.3-2 and 1.3-3.

1. Actual emissions: (heat input basis)

Particulate:  $2.0 \text{ (lbs/Mgal)} / 140000 \text{ (btu/gal)} = 0.0143 \text{ (lbs/MM btu)}$   
 SO<sub>2</sub>:  $42.6 \text{ (lbs/Mgal)} / 140000 \text{ (btu/gal)} = 0.304 \text{ (lbs/MM btu)}$

2. Annual actual and potential: 8760 (hrs/year) emission in (tons/year).

Particulates:

ACTUAL:  $2.0 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 0.66 \text{ TPY}$

POTENTIAL:  $2.0 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 0.66 \text{ TPY}$

SO<sub>2</sub>:

ACTUAL:  $42.6 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 13.99 \text{ TPY}$

POTENTIAL:  $42.6 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 13.99 \text{ TPY}$

NOx:

ACTUAL:  $20.0 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 6.57 \text{ TPY}$

POTENTIAL:  $20.0 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 6.57 \text{ TPY}$

CO:

ACTUAL:  $5.0 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 1.64 \text{ TPY}$

POTENTIAL:  $5.0 \text{ (lbs/Mgal)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 140000 \text{ (btu/gal)} / 2000 \text{ (lbs/ton)} = 1.64 \text{ TPY}$

**EMISSIONS ACTIVITY CATEGORY FORM  
FUEL BURNING OPERATION**OEPA EMISSIONS UNIT ID B011 (if established)

1. Input capacities (million btu/hr): Rated: 10.5 Note: Indicate units if different  
Maximum: 10.5  
Normal: 10.5
- Output capacities (lbs steam/hr): Rated: 8,500  
Maximum: 8,500  
Normal: 8,500

Note: Only provide output capacities for steam producing operations.

2. Percent used for: Space heat 80% Process 20% Power -0-%
3. Type of fuel fired (check one or more):  coal  oil  natural gas  
 wood  LPG  other (specify) \_\_\_\_\_
4. Type of draft (check one):  natural  induced  forced
5. Type of combustion monitoring (check one or more):  
 fuel/air ratio  oxygen  opacity  X  
other (describe) \_\_\_\_\_

**COAL-FIRED UNITS**

6. Type of coal firing (check one):  hand-fired  underfeed stoker   
traveling grate  chain grate  spreader stoker   
cyclones  pulverized-dry bottom  pulverized-wet bottom  
 other (describe) \_\_\_\_\_
7. Fly ash reinjection (check one):  yes  no

**OIL-FIRED UNITS**

8. Type of oil (check one or more):  no. 2  no. 6  
 other (describe) \_\_\_\_\_
9. Type of atomization (check one or more):  oil pressure  steam pressure  
 compressed air  rotary cup  
 other (describe) \_\_\_\_\_
10. Oil preheater (check one):  yes  no If yes, indicate temperature  
\_\_\_\_\_°F

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 DATE APPLICATION RECEIVED: \_\_\_\_\_  
 FACILITY ID: \_\_\_\_\_

11. Complete the following table for fuels identified in item 3:

Fuel	Heat Content (BTU/unit)	%	%	Fuel Usage		
				Estimated Maximum Per Year	Normal Per Hr.	Max. Per Hr.
Coal	BTU/lb			tons	lbs	lbs
Gas	1050 BTU/cu ft	N/A	N/A	759 MM cu ft	57,143 cu ft	95,238.1 cu ft
Oil	140M BTU/gal	0.01	0.3	1,873 Mgal	428.6 gal	714.29 gal
Wood	BTU/lb			tons	lbs	lbs
LPG	BTU/gal			gal	gal	gal
Other						

000020

Specific Emissions Unit Information Form

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One copy of this form should be filled out for each air pollution emissions unit covered by this permit to install application. Instructions for this form can be found starting on page 15 of the permit to install application.

- 25. OEPA Emissions Unit ID (4 digit number):   B012
- 26. Company ID for Emissions Unit:   FEMP ID 10-016
- 27. Emissions Unit Activity Description:   Gas-/Oil-Fired 10.5 MM btu/hr Boiler for steam generation.
- 28. Equipment Description:   10.5 MM btu/hr Gas-/oil- Fired Boiler

- 29. Construction/Modification/Emissions Testing Schedule
- |  | DATE |
|--|------|
| Equipment Ordered (month/year) - - - - -   | TBD  |
| Commence Construction Date (month/year) - - -  | TBD  |
| Initial Startup Date (month/year) - - - - -  | TBD  |
| Most Recent Modification Date (if applicable)<br>(as defined in OAC rule 3745-31-01(j)): | N/A  |
| Performance Testing - - - - -  | N/A  |

30. Emissions Information:

Complete the following table for each criteria air pollutant proposed to be emitted from the emissions unit at a rate greater than one ton/year (list each pollutant on a separate line), and for any pollutant for which an emissions limit has been established (per a state or federal regulation or Permit to Install) which limits air emissions of the pollutant to less than one ton/year.

Pollutant Name	Proposed Maximum Hourly Emission (lb/hr)	Proposed Maximum Yearly Emission (Tons/year)
Particulate (Gas)	0.063 lbs/hr	0.28 Tons/year
SO <sub>2</sub> (Gas)	0.006 lbs/hr	0.026 Tons/year
NO <sub>x</sub> (Gas)	1.05 lbs/hr	4.6 Tons/year
CO (Gas)	0.63 lbs/hr	2.76 Tons/year
VOC (Gas)	0.063 lbs/hr	0.28 Tons/year
Particulate (Oil)	0.15 lbs/hr	0.657 Tons/year
SO <sub>2</sub> (Oil)	3.19 lbs/hr	13.98 Tons/year
NO <sub>x</sub> (Oil)	1.47 lbs/hr	6.439 Tons/year
CO (Oil)	0.42 lbs/hr	1.84 Tons/year
VOC (Oil)	0.015 lbs/hr	0.066 Tons/year

(If additional pollutants need to be identified, copy this page and attach the additional pages. Check here  if additional copies of this page are attached.)

31. Proposed Operating Schedule:

	Hours Per Day	Hours per Year
Average	24	8760
Maximum	24	8760

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32. Add-on Control Equipment Information:

Does this emissions unit employ add-on emissions control equipment?  yes  no  
If your answer is yes, then fill out the table below. If your answer is no, then proceed to item # 33.

Control Equipment Type Codes:

- A. Fabric filter/Baghouse
- B. Electrostatic Precipitator
- C. Catalytic Incinerator
- D. Thermal Incinerator
- E. Flare
- F. Wet Scrubber
- G. Condenser
- H. Carbon Adsorber
- I. Concentrator
- J. Cyclone/Multiclone
- K. Settling Chamber
- L. Other, describe \_\_\_\_\_

Item	Control Device #1	Control Device #2	Control Device #3
Type (See Above Codes)			
Configuration			
Manufacturer's Name			
Company ID			
Month/Year Installed			
Pollutant(s) Controlled			
Average Design Control Efficiency(%)			
Operating Control Efficiency(%)			
Inlet Gas Flow (acfm)			
Inlet Gas Temperature (°F)			
Maximum Controlled Emission Rate for Each Pollutant controlled (lb/hr, grain/dscf or ppmv)			

Supplemental control device information (see instructions)

Control Device #1 \_\_\_\_\_

Control Device #2 \_\_\_\_\_

Control Device #3 \_\_\_\_\_

33. Attach a Process or Activity Flow Diagram to this application for each emissions unit included in the application. Please see the instructions on page xx.

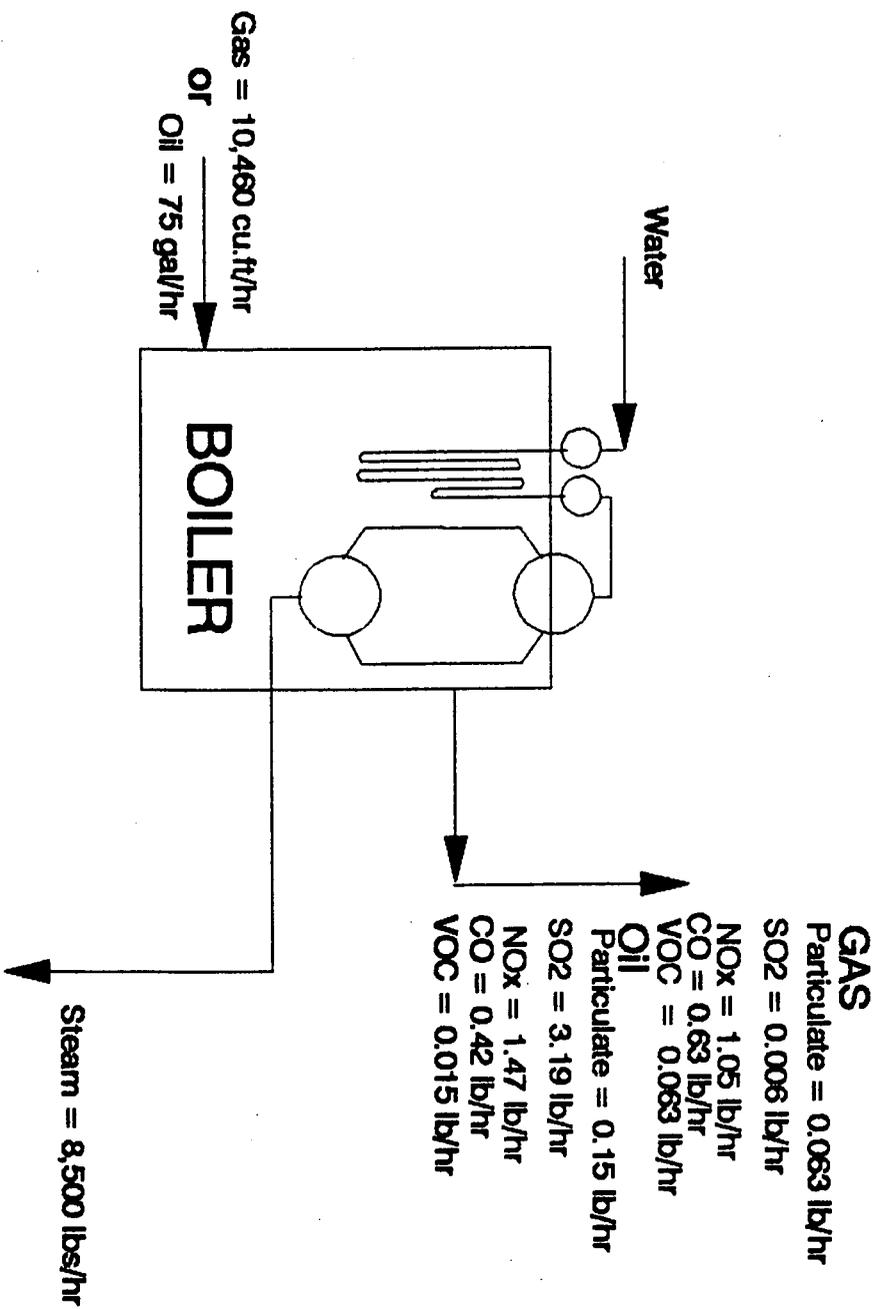
Process Flow Diagram attached.

# PROCESS FLOW DIAGRAM

## EU-B012-96

### BOILER B012

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12-19-96  
EF

34. Emissions egress point(s) information: (Provide the following information for each point at which emissions are released into the ambient air from the emissions unit list each and individual egress point on a separate line):

Egress point description codes:

A. vertical stack (unobstructed)

B. horizontal/downward stack

C. vertical stack (obstructed)

D. fugitive

Company ID for Egress Point	Description Code
EP-B012-01	A

35. Are you are applying, per OAC rule 3745-35-07, for federally enforceable limits as part of this permit issuance?  yes  no
36. Are you requesting any information included in this application for this emissions unit is being claimed as a trade secret per Ohio Revised Code (ORC) 3704.08?  yes  no

FOR OHIO EPA USE ONLY  
 DATE APPLICATION RECEIVED: \_\_\_\_\_  
 FACILITY ID: \_\_\_\_\_

Emission Calculations for: PERMIT TO INSTALL

Facility: Fernald Environmental Management Project Computed by: Ervin Fisher  
 Source No: 1431110128 B012 Date: December 20, 1996  
 Source ID: FEMP ID NO. 10-016

I. Emission Estimates:

Boiler rating (maximum heat input): 10.5 (MM btu/hour).  
 Annual operating hours: 8760 hours/year.  
 Emission factors: (given as lbs/MM cf gas burned)  
 particulate: 13.7, SO<sub>2</sub>: 0.6, NO<sub>x</sub>: 81.0, CO: 61.0, VOC: 3.0  
 Emission factor reference: AP-42, tables 1.4-1, 1.4-2 and 1.4-3

1. Actual emissions: (heat input basis)

Particulate:  $13.7 \text{ (lbs/MM cf)} / 1050.0 \text{ (btu/cf)} = 0.013 \text{ (lbs/MM btu)}$   
 SO<sub>2</sub>:  $0.6 \text{ (lbs/MM cf)} / 1050.0 \text{ (btu/cf)} = 0.0006 \text{ (lbs/MM btu)}$

2. Annual actual and potential: 8760 (hrs/year) emission in (tons/year).

Particulates:

ACTUAL:  $13.7 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.63 \text{ TPY}$

POTENTIAL:  $13.7 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.63 \text{ TPY}$

SO<sub>2</sub>:

ACTUAL:  $0.6 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.026 \text{ TPY}$

POTENTIAL:  $0.6 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.026 \text{ TPY}$

NO<sub>x</sub>:

ACTUAL:  $81.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 3.55 \text{ TPY}$

POTENTIAL:  $81.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 3.55 \text{ TPY}$

CO:

ACTUAL:  $61.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 2.67 \text{ TPY}$

POTENTIAL:  $61.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 2.67 \text{ TPY}$

VOC:

ACTUAL:  $3.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.13 \text{ TPY}$

POTENTIAL:  $3.0 \text{ (lbs/MM cf)} \times 10.5 \text{ (MM btu/hr)} \times 8760 \text{ (hrs/year)} / 1050 \text{ (btu/cf)} / 2000 \text{ (lbs/ton)} = 0.13 \text{ TPY}$

FOR OHIO EPA USE ONLY  
 DATE APPLICATION RECEIVED: \_\_\_\_\_  
 FACILITY ID: \_\_\_\_\_

Emission Calculations for: PERMIT TO INSTALL

Facility: Fernald Environmental Management Project Computed by: Ervin Fisher  
 Source No: 1431110128 B012 Date: December 20, 1996  
 Source ID: FEMP ID NO. 10-016

I. Emission Estimates:

Boiler rating (maximum heat input): 10.5 (MM btu/hour).  
 Annual operating hours: 8760 hours/year.  
 Emission factors: (given as lbs/1000 gal. fuel burned)  
 particulate: 2.0, SO<sub>2</sub>: 42.6, NO<sub>x</sub>: 20.0, CO: 5.0, VOC: 0.052  
 Emission factor reference: AP-42, tables 1.3-2 and 1.3-3.

1. Actual emissions: (heat input basis)

Particulate: 2.0 (lbs/Mgal) / 140000 (btu/gal) = 0.0143 (lbs/MM btu)  
 SO<sub>2</sub>: 42.6 (lbs/Mgal) / 140000 (btu/gal) = 0.304 (lbs/MM btu)

2. Annual actual and potential: 8760 (hrs/year) emission in (tons/year).

Particulates:

ACTUAL: 2.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 0.66 TPY

POTENTIAL: 2.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 0.66 TPY

SO<sub>2</sub>:

ACTUAL: 42.6 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 13.99 TPY

POTENTIAL: 42.6 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 13.99 TPY

NO<sub>x</sub>:

ACTUAL: 20.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 6.57 TPY

POTENTIAL: 20.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 6.57 TPY

CO:

ACTUAL: 5.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 1.64 TPY

POTENTIAL: 5.0 (lbs/Mgal) x 10.5 (MM btu/hr) x 8760 (hrs/year)/140000 (btu/gal)/2000 (lbs/ton) = 1.64 TPY

### EMISSIONS ACTIVITY CATEGORY FORM FUEL BURNING OPERATION

OEPA EMISSIONS UNIT ID B012 (if established)

1. Input capacities (million btu/hr): Rated: 10.5 Note: Indicate units if different  
 Maximum: 10.5  
 Normal: 10.5
- Output capacities (lbs steam/hr): Rated: 8,500  
 Maximum: 8,500  
 Normal: 8,500

Note: Only provide output capacities for steam producing operations.

2. Percent used for: Space heat 80% Process 20% Power -0-%
3. Type of fuel fired (check one or more):  coal  oil  natural gas  
 wood  LPG  other (specify) \_\_\_\_\_
4. Type of draft (check one):  natural  induced  forced
5. Type of combustion monitoring (check one or more):  
 fuel/air ratio  oxygen  opacity  X  
 other (describe) \_\_\_\_\_

#### COAL-FIRED UNITS

6. Type of coal firing (check one):  hand-fired  underfeed stoker   
 traveling grate  chain grate  spreader stoker   
 cyclones  pulverized-dry bottom  pulverized-wet bottom  
 other (describe) \_\_\_\_\_
7. Fly ash reinjection (check one):  yes  no

#### OIL-FIRED UNITS

8. Type of oil (check one or more):  no. 2  no. 6  
 other (describe) \_\_\_\_\_
9. Type of atomization (check one or more):  oil pressure  steam pressure  
 compressed air  rotary cup  
 other (describe) \_\_\_\_\_
10. Oil preheater (check one):  yes  no if yes, indicate temperature  
 \_\_\_\_\_ °F

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DATE APPLICATION RECEIVED: \_\_\_\_\_  
FACILITY ID: \_\_\_\_\_

11. Complete the following table for fuels identified in item 3:

Fuel	Heat Content (BTU/unit)	%	%	Fuel Usage		
				Estimated Maximum Per Year	Normal Per Hr.	Max. Per Hr.
Coal	BTU/lb			tons	lbs	lbs
Gas	1050 BTU/cu ft	N/A	N/A	759 MM cu ft	57,143 cu ft	95,238.1 cu ft
Oil	140M BTU/gal	0.01	0.3	1,873 Mgal	428.6 gal	714.29 gal
Wood	BTU/lb			tons	lbs	lbs
LPG	BTU/gal			gal	gal	gal
Other						

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Additional Information

The following additional information is required to be submitted with the application. This information should be submitted on either these forms or on separate pieces of paper and attached to the permit to install application form. This additional information is divided into four sections: General information which is required for all permit to install applications, information required for air pollution applications, information required for wastewater applications and information required for solid waste disposal facilities.

Additional Information Required for Air Pollution Applications

- 1. Will the proposed source/facility involve any of the following (Check all that Apply)?
  - Air Discharge
  - Wastewater Treatment Works
  - Solid Waste Disposal Facility
  - Hazardous Waste Disposal Facility

- 2. State the reason for the application. Is this a new installation, modification to an existing source/facility, reconstruction of an existing source/facility, or startup of a source/facility that has been permanently shutdown for \_\_\_\_\_ year?

This is a new source which has not been previously permitted.

- 3. Has a previous Ohio EPA application or plan submission been filed for this source/facility? If so, state the date and type of the application previously submitted.

yes     no    Date: \_\_\_\_\_    Type:  Air     Solid Waste  
 Wastewater     Hazardous Waste

- 4. Will the proposed source/facility comply with all rules, laws, and regulations of Ohio EPA and U.S. EPA?  yes     no

- 5. Do you wish to request permit to install registration status via Ohio Administrative Code 3745-31-05(E)?  yes     no

- 6. Are the proposed sources required to comply with the following federal requirements?  
 Note: Don't be afraid to call your Ohio EPA field office contact to ask them if your emissions units need to comply with these standards.

yes     no    New Source Performance Standards (NSPS)  
 New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources. If your emissions unit(s) are listed under one of these standards then answer yes.

yes     no    National Emission Standards for Hazardous Air Pollutants (NESHAPS)  
 National Emissions Standards for Hazardous Air Pollutants are listed under 40 CFR 61. If your emissions unit(s) are listed under one of these standards then answer yes.

yes     no    Prevention of Significant Deterioration (PSD)  
 These rules are found under 40 CFR 51.21.

yes     no    Appendix "S" - Emission Offset Policy  
 This policy can be found under "Appendix S to 40 CFR part 51 - Emissions Offset Interpretive Ruling."

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7. Will the proposed emissions units employ best available technology (BAT) <sup>7945</sup> ~~that is~~ required under Ohio Administrative Code 3745-31-05(A)(3). The definition of best available technology can be found in Ohio Revised Code 3704.01(F).

yes     no

9. Will the proposed sources cause the significant degradation of air quality?

yes     no

10. Will the proposed sources interfere with the attainment and maintenance of the ambient air quality standards?

yes     no

11. Describe any emissions unit monitoring, emission monitoring, or control equipment monitoring devices to be installed by the applicant which are not already described in the attached Emissions Activity Form(s).

None

12. Will the proposed emissions unit(s) involve the use of asbestos, benzene, beryllium, mercury, or vinyl chloride?

- yes     no    Asbestos
- yes     no    Benzene
- yes     no    Beryllium
- yes     no    Mercury
- yes     no    Vinyl Chloride

13. Please include the estimated cost of any air pollution control equipment to be installed on the proposed emissions unit(s).

N/A

000030