OhioEPA

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
MONTGOMERY COUNTY
Application No: 08-04120

DATE: 07/27/00

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
Y	**SYNTHETIC MINOR**
	CEMS
	MACT
Subpart Kb	**NSPS**
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Franciscan Medical Center-Dayton Camp
David F. Capal
One Franciscan Way
Dayton, OH 45408

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

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

CC: USEPA **RAPCA**

FINAL PERMIT TO INSTALL 08-04120

Application Number:	08-04120
APS Premise Number:	0857040304
Permit Fee:	**$500.00**
Name of Facility:	Franciscan Medical Center-Dayton Camp
Person to Contact:	David F. Capal
Address:	One Franciscan Way Dayton, OH 45408

Location of proposed air contaminant source(s) [emissions unit(s)]:
One Franciscan Way
Dayton, **Ohio**

Description of proposed emissions unit(s):
natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.

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 are inadequate 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 prove to be inadequate 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

Pollutant	Tons Per Year
VOC	< 0.05
SO2	79.52

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T001 - 20,000 gallon Underground Diesel Fuel Storage Tank #1	OAC rule 3745-31-05 (A)(3)	< 0.01 TPY OC See Section B.1.
	40 CFR Part 60, Subpart Kb	See Section C.1.
	OAC rule 3745-21-09 (L)(2)	fixed roof tank with a capacity less than 40,000 gallons
	OAC rule 3745-35-07(B) Synthetic Minor Restriction	See Sections A.2.a. and B.2.

2. Additional Terms and Conditions

2.a By way of limiting the fuel oil throughput of emissions units T001 - T005 combined (see Section B.2.) the sulfur dioxide emissions from this facility shall not exceed 79.52 TPY, as a rolling, 12-month summation. See Section F. for the attendant maximum % sulfur content requirement and limitation on the facility-wide sulfur dioxide emissions from the identified combustion units.

B. Operational Restrictions

1. The tank shall be loaded by means of a submerged fill pipe, as defined in the OAC rule 3745-21-01 (C)(6) as any fill pipe with the discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank.

2. In accordance with the synthetic minor provisions of OAC rule 3745-35-07 (B), the maximum No. 2 oil throughput for emissions units T001 - T005 combined shall not exceed 2,800,000 gallons based upon a rolling, 12-month summation of the No. 2 fuel oil throughputs.

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To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the No. 2 fuel oil throughput limitations specified in the following table for emissions units T001 - T005 combined:

Month(s)	Maximum Allowable Cumulative No. 2. Fuel Oil Usage
1	233,333 gallons
1-2	466,666 gallons
1-3	699,999 gallons
1-4	933,332 gallons
1-5	1,166,665 gallons
1-6	1,399,998 gallons
1-7	1,633,331 gallons
1-8	1,866,664 gallons
1-9	2,099,997 gallons
1-10	2,333,330 gallons
1-11	2,566,663 gallons
1-12	2,800,000 gallons

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual No. 2 fuel oil throughput limitation shall be based upon a rolling, 12-month summation of the fuel throughputs.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

2. The permittee shall maintain monthly records of the following information:

   a. The No. 2 fuel oil throughput, in gallons, for each storage tank;

   b. The No. 2 fuel oil throughput, in gallons, for emissions units T001 - T005 combined;

   c. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the No. 2 fuel oil throughput. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative No. 2 fuel oil throughput for each calendar month;

   d. The calculated SO2 emission rates (see calculation methodology in Section E.1.c.); and

   e. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the SO2 emission rate.

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D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel throughput limitation; the rolling, 12-month, SO2 emission limitation; and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative fuel throughput limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation -

   < 0.01 TPY OC

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and demonstrated by using the “TANKS 3.1" software program written by the USEPA.

   a. Emission Limitation -

   2,800,000 gallons/year throughput limitation as a rolling, 12-month summation for the emissions units T001 - T005 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2.

   a. Emission Limitation -

   79.52 TPY SO2 as a rolling, 12-month summation for emissions units B001 - B006 and B016 - B024 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and shall be the summation of the 12-monthly gallon throughputs from emissions units T001 - T005 multiplied by the AP-42 Table 1.3-1 (9/98) emission factor of 0.0568 lb SO2/gal No. 2 fuel oil and dividing by 2,000 lbs/ton.

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F. Miscellaneous Requirements

1. The permittee operates the following fuel burning equipment and emergency electrical generators:

   B001 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #1
   B002 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #2
   B003 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #3
   B004 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #4
   B005 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #5
   B006 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #6
   B016 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #7
   B017 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #8
   B018 - 8.8 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #1
   B019 - 1.6 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #2
   B020 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #1
   B021 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #2
   B022 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #3
   B023 - 2520 HP Diesel Engine, Emergency Generator #1
   B024 - 2520 HP Diesel Engine, Emergency Generator #2

2. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.4% by weight.

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. The permittee shall submit quarterly deviation (excursion) reports in accordance with the general terms and conditions Section A.2. which identify each shipment of oil that has a sulfur content greater than 0.4% by weight, the actual sulfur content of that oil shipment, and the quantity of oil with a sulfur content greater than 0.4% by weight.

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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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T002 - 20,000 gallon Underground Diesel Fuel Storage Tank #2	OAC rule 3745-31-05 (A)(3)	< 0.01 TPY OC See Section B.1.
	40 CFR Part 60, Subpart Kb	See Section C.1.
	OAC rule 3745-21-09 (L)(2)	fixed roof tank with a capacity less than 40,000 gallons
	OAC rule 3745-35-07(B) Synthetic Minor Restriction	See Sections A.2.a. and B.2.

2. Additional Terms and Conditions

2.a By way of limiting the fuel oil throughput of emissions units T001 - T005 combined (see Section B.2.) the sulfur dioxide emissions from this facility shall not exceed 79.52 TPY, as a rolling, 12-month summation. See Section F. for the attendant maximum % sulfur content requirement and limitation on the facility-wide sulfur dioxide emissions from the identified combustion units.

B. Operational Restrictions

1. The tank shall be loaded by means of a submerged fill pipe, as defined in the OAC rule 3745-21-01 (C)(6) as any fill pipe with the discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank.

2. In accordance with the synthetic minor provisions of OAC rule 3745-35-07 (B), the maximum No. 2 oil throughput for emissions units T001 - T005 combined shall not exceed 2,800,000 gallons based upon a rolling, 12-month summation of the No. 2 fuel oil throughputs.

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To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the No. 2 fuel oil throughput limitations specified in the following table for emissions units T001 - T005 combined:

Month(s)	Maximum Allowable Cumulative No. 2. Fuel Oil Usage
1	233,333 gallons
1-2	466,666 gallons
1-3	699,999 gallons
1-4	933,332 gallons
1-5	1,166,665 gallons
1-6	1,399,998 gallons
1-7	1,633,331 gallons
1-8	1,866,664 gallons
1-9	2,099,997 gallons
1-10	2,333,330 gallons
1-11	2,566,663 gallons
1-12	2,800,000 gallons

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual No. 2 fuel oil throughput limitation shall be based upon a rolling, 12-month summation of the fuel throughputs.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

2. The permittee shall maintain monthly records of the following information:

   a. The No. 2 fuel oil throughput, in gallons, for each storage tank;

   b. The No. 2 fuel oil throughput, in gallons, for emissions units T001 - T005 combined;

   c. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the No. 2 fuel oil throughput. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative No. 2 fuel oil throughput for each calendar month;

   d. The calculated SO2 emission rates (see calculation methodology in Section E.1.c.); and

   e. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the SO2 emission rate.

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D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel throughput limitation; the rolling, 12-month, SO2 emission limitation; and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative fuel throughput limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation -

   < 0.01 TPY OC

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and demonstrated by using the “TANKS 3.1" software program written by the USEPA.

   a. Emission Limitation -

   2,800,000 gallons/year throughput limitation as a rolling, 12-month summation for the emissions units T001 - T005 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2.

   a. Emission Limitation -

   79.52 TPY SO2 as a rolling, 12-month summation for emissions units B001 - B006 and B016 - B024 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and shall be the summation of the 12-monthly gallon throughputs from emissions units T001 - T005 multiplied by the AP-42 Table 1.3-1 (9/98) emission factor of 0.0568 lb SO2/gal No. 2 fuel oil and dividing by 2,000 lbs/ton.

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F. Miscellaneous Requirements

1. The permittee operates the following fuel burning equipment and emergency electrical generators:

   B001 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #1
   B002 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #2
   B003 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #3
   B004 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #4
   B005 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #5
   B006 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #6
   B016 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #7
   B017 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #8
   B018 - 8.8 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #1
   B019 - 1.6 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #2
   B020 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #1
   B021 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #2
   B022 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #3
   B023 - 2520 HP Diesel Engine, Emergency Generator #1
   B024 - 2520 HP Diesel Engine, Emergency Generator #2

2. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.4% by weight.

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. The permittee shall submit quarterly deviation (excursion) reports in accordance with the general terms and conditions Section A.2. which identify each shipment of oil that has a sulfur content greater than 0.4% by weight, the actual sulfur content of that oil shipment, and the quantity of oil with a sulfur content greater than 0.4% by weight.

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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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T003 - 20,000 gallon Underground Diesel Fuel Storage Tank #3	OAC rule 3745-31-05 (A)(3)	< 0.01 TPY OC See Section B.1.
	40 CFR Part 60, Subpart Kb	See Section C.1.
	OAC rule 3745-21-09 (L)(2)	fixed roof tank with a capacity less than 40,000 gallons
	OAC rule 3745-35-07(B) Synthetic Minor Restriction	See Sections A.2.a. and B.2.

2. Additional Terms and Conditions

2.a By way of limiting the fuel oil throughput of emissions units T001 - T005 combined (see Section B.2.) the sulfur dioxide emissions from this facility shall not exceed 79.52 TPY, as a rolling, 12-month summation. See Section F. for the attendant maximum % sulfur content requirement and limitation on the facility-wide sulfur dioxide emissions from the identified combustion units.

B. Operational Restrictions

1. The tank shall be loaded by means of a submerged fill pipe, as defined in the OAC rule 3745-21-01 (C)(6) as any fill pipe with the discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank.

2. In accordance with the synthetic minor provisions of OAC rule 3745-35-07 (B), the maximum No. 2 oil throughput for emissions units T001 - T005 combined shall not exceed 2,800,000 gallons based upon a rolling, 12-month summation of the No. 2 fuel oil throughputs.

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To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the No. 2 fuel oil throughput limitations specified in the following table for emissions units T001 - T005 combined:

Month(s)	Maximum Allowable Cumulative No. 2. Fuel Oil Usage
1	233,333 gallons
1-2	466,666 gallons
1-3	699,999 gallons
1-4	933,332 gallons
1-5	1,166,665 gallons
1-6	1,399,998 gallons
1-7	1,633,331 gallons
1-8	1,866,664 gallons
1-9	2,099,997 gallons
1-10	2,333,330 gallons
1-11	2,566,663 gallons
1-12	2,800,000 gallons

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual No. 2 fuel oil throughput limitation shall be based upon a rolling, 12-month summation of the fuel throughputs.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

2. The permittee shall maintain monthly records of the following information:

   a. The No. 2 fuel oil throughput, in gallons, for each storage tank;

   b. The No. 2 fuel oil throughput, in gallons, for emissions units T001 - T005 combined;

   c. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the No. 2 fuel oil throughput. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative No. 2 fuel oil throughput for each calendar month;

   d. The calculated SO2 emission rates (see calculation methodology in Section E.1.c.); and

   e. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the SO2 emission rate.

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D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel throughput limitation; the rolling, 12-month, SO2 emission limitation; and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative fuel throughput limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation -

   < 0.01 TPY OC

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and demonstrated by using the “TANKS 3.1" software program written by the USEPA.

   a. Emission Limitation -

   2,800,000 gallons/year throughput limitation as a rolling, 12-month summation for the emissions units T001 - T005 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2.

   a. Emission Limitation -

   79.52 TPY SO2 as a rolling, 12-month summation for emissions units B001 - B006 and B016 - B024 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and shall be the summation of the 12-monthly gallon throughputs from emissions units T001 - T005 multiplied by the AP-42 Table 1.3-1 (9/98) emission factor of 0.0568 lb SO2/gal No. 2 fuel oil and dividing by 2,000 lbs/ton.

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F. Miscellaneous Requirements

1. The permittee operates the following fuel burning equipment and emergency electrical generators:

   B001 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #1
   B002 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #2
   B003 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #3
   B004 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #4
   B005 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #5
   B006 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #6
   B016 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #7
   B017 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #8
   B018 - 8.8 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #1
   B019 - 1.6 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #2
   B020 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #1
   B021 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #2
   B022 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #3
   B023 - 2520 HP Diesel Engine, Emergency Generator #1
   B024 - 2520 HP Diesel Engine, Emergency Generator #2

2. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.4% by weight.

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. The permittee shall submit quarterly deviation (excursion) reports in accordance with the general terms and conditions Section A.2. which identify each shipment of oil that has a sulfur content greater than 0.4% by weight, the actual sulfur content of that oil shipment, and the quantity of oil with a sulfur content greater than 0.4% by weight.

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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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T004 - 20,000 gallon Underground Diesel Fuel Storage Tank #4	OAC rule 3745-31-05 (A)(3)	< 0.01 TPY OC See Section B.1.
	40 CFR Part 60, Subpart Kb	See Section C.1.
	OAC rule 3745-21-09 (L)(2)	fixed roof tank with a capacity less than 40,000 gallons
	OAC rule 3745-35-07(B) Synthetic Minor Restriction	See Sections A.2.a. and B.2.

2. Additional Terms and Conditions

2.a By way of limiting the fuel oil throughput of emissions units T001 - T005 combined (see Section B.2.) the sulfur dioxide emissions from this facility shall not exceed 79.52 TPY, as a rolling, 12-month summation. See Section F. for the attendant maximum % sulfur content requirement and limitation on the facility-wide sulfur dioxide emissions from the identified combustion units.

B. Operational Restrictions

1. The tank shall be loaded by means of a submerged fill pipe, as defined in the OAC rule 3745-21-01 (C)(6) as any fill pipe with the discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank.

2. In accordance with the synthetic minor provisions of OAC rule 3745-35-07 (B), the maximum No. 2 oil throughput for emissions units T001 - T005 combined shall not exceed 2,800,000 gallons based upon a rolling, 12-month summation of the No. 2 fuel oil throughputs.

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To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the No. 2 fuel oil throughput limitations specified in the following table for emissions units T001 - T005 combined:

Month(s)	Maximum Allowable Cumulative No. 2. Fuel Oil Usage
1	233,333 gallons
1-2	466,666 gallons
1-3	699,999 gallons
1-4	933,332 gallons
1-5	1,166,665 gallons
1-6	1,399,998 gallons
1-7	1,633,331 gallons
1-8	1,866,664 gallons
1-9	2,099,997 gallons
1-10	2,333,330 gallons
1-11	2,566,663 gallons
1-12	2,800,000 gallons

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual No. 2 fuel oil throughput limitation shall be based upon a rolling, 12-month summation of the fuel throughputs.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

2. The permittee shall maintain monthly records of the following information:

   a. The No. 2 fuel oil throughput, in gallons, for each storage tank;

   b. The No. 2 fuel oil throughput, in gallons, for emissions units T001 - T005 combined;

   c. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the No. 2 fuel oil throughput. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative No. 2 fuel oil throughput for each calendar month;

   d. The calculated SO2 emission rates (see calculation methodology in Section E.1.c.); and

   e. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the SO2 emission rate.

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D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel throughput limitation; the rolling, 12-month, SO2 emission limitation; and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative fuel throughput limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation -

   < 0.01 TPY OC

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and demonstrated by using the “TANKS 3.1" software program written by the USEPA.

   a. Emission Limitation -

   2,800,000 gallons/year throughput limitation as a rolling, 12-month summation for the emissions units T001 - T005 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2.

   a. Emission Limitation -

   79.52 TPY SO2 as a rolling, 12-month summation for emissions units B001 - B006 and B016 - B024 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and shall be the summation of the 12-monthly gallon throughputs from emissions units T001 - T005 multiplied by the AP-42 Table 1.3-1 (9/98) emission factor of 0.0568 lb SO2/gal No. 2 fuel oil and dividing by 2,000 lbs/ton.

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F. Miscellaneous Requirements

1. The permittee operates the following fuel burning equipment and emergency electrical generators:

   B001 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #1
   B002 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #2
   B003 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #3
   B004 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #4
   B005 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #5
   B006 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #6
   B016 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #7
   B017 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #8
   B018 - 8.8 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #1
   B019 - 1.6 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #2
   B020 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #1
   B021 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #2
   B022 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #3
   B023 - 2520 HP Diesel Engine, Emergency Generator #1
   B024 - 2520 HP Diesel Engine, Emergency Generator #2

2. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.4% by weight.

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. The permittee shall submit quarterly deviation (excursion) reports in accordance with the general terms and conditions Section A.2. which identify each shipment of oil that has a sulfur content greater than 0.4% by weight, the actual sulfur content of that oil shipment, and the quantity of oil with a sulfur content greater than 0.4% by weight.

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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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T005 - 20,000 gallon Underground Diesel Fuel Storage Tank #5	OAC rule 3745-31-05 (A)(3)	< 0.01 TPY OC See Section B.1.
	40 CFR Part 60, Subpart Kb	See Section C.1.
	OAC rule 3745-21-09 (L)(2)	fixed roof tank with a capacity less than 40,000 gallons
	OAC rule 3745-35-07(B) Synthetic Minor Restriction	See Sections A.2.a. and B.2.

2. Additional Terms and Conditions

2.a By way of limiting the fuel oil throughput of emissions units T001 - T005 combined (see Section B.2.) the sulfur dioxide emissions from this facility shall not exceed 79.52 TPY, as a rolling, 12-month summation. See Section F. for the attendant maximum % sulfur content requirement and limitation on the facility-wide sulfur dioxide emissions from the identified combustion units.

B. Operational Restrictions

1. The tank shall be loaded by means of a submerged fill pipe, as defined in the OAC rule 3745-21-01 (C)(6) as any fill pipe with the discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank.

2. In accordance with the synthetic minor provisions of OAC rule 3745-35-07 (B), the maximum No. 2 oil throughput for emissions units T001 - T005 combined shall not exceed 2,800,000 gallons based upon a rolling, 12-month summation of the No. 2 fuel oil throughputs.

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To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the No. 2 fuel oil throughput limitations specified in the following table for emissions units T001 - T005 combined:

Month(s)	Maximum Allowable Cumulative No. 2. Fuel Oil Usage
1	233,333 gallons
1-2	466,666 gallons
1-3	699,999 gallons
1-4	933,332 gallons
1-5	1,166,665 gallons
1-6	1,399,998 gallons
1-7	1,633,331 gallons
1-8	1,866,664 gallons
1-9	2,099,997 gallons
1-10	2,333,330 gallons
1-11	2,566,663 gallons
1-12	2,800,000 gallons

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual No. 2 fuel oil throughput limitation shall be based upon a rolling, 12-month summation of the fuel throughputs.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

2. The permittee shall maintain monthly records of the following information:

   a. The No. 2 fuel oil throughput, in gallons, for each storage tank;

   b. The No. 2 fuel oil throughput, in gallons, for emissions units T001 - T005 combined;

   c. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the No. 2 fuel oil throughput. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative No. 2 fuel oil throughput for each calendar month;

   d. The calculated SO2 emission rates (see calculation methodology in Section E.1.c.); and

   e. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the SO2 emission rate.

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D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel throughput limitation; the rolling, 12-month, SO2 emission limitation; and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative fuel throughput limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under Section A.1.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation -

   < 0.01 TPY OC

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and demonstrated by using the “TANKS 3.1" software program written by the USEPA.

   a. Emission Limitation -

   2,800,000 gallons/year throughput limitation as a rolling, 12-month summation for the emissions units T001 - T005 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2.

   a. Emission Limitation -

   79.52 TPY SO2 as a rolling, 12-month summation for emissions units B001 - B006 and B016 - B024 combined

   Applicable Compliance Method -

   Compliance shall be based upon record keeping as specified in Section C.2. and shall be the summation of the 12-monthly gallon throughputs from emissions units T001 - T005 multiplied by the AP-42 Table 1.3-1 (9/98) emission factor of 0.0568 lb SO2/gal No. 2 fuel oil and dividing by 2,000 lbs/ton.

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F. Miscellaneous Requirements

1. The permittee operates the following fuel burning equipment and emergency electrical generators:

   B001 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #1
   B002 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #2
   B003 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #3
   B004 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #4
   B005 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #5
   B006 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #6
   B016 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #7
   B017 - 6.3 mmBtu/hr natural gas/No. 2 fuel oil boiler, S.W. Boiler #8
   B018 - 8.8 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #1
   B019 - 1.6 mmBtu/hr natural gas/No. 2 fuel oil boiler, N.W. Boiler #2
   B020 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #1
   B021 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #2
   B022 - 8.4 mmBtu/hr natural gas/No. 2 fuel oil boiler, W.P. Boiler #3
   B023 - 2520 HP Diesel Engine, Emergency Generator #1
   B024 - 2520 HP Diesel Engine, Emergency Generator #2

2. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.4% by weight.

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. The permittee shall submit quarterly deviation (excursion) reports in accordance with the general terms and conditions Section A.2. which identify each shipment of oil that has a sulfur content greater than 0.4% by weight, the actual sulfur content of that oil shipment, and the quantity of oil with a sulfur content greater than 0.4% by weight.

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NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators. CITY/TWP Dayton

SIC CODE 8062 SCC CODE 4-04-004-13;4-04-004-14 EMISSIONS UNIT ID T001

EMISSIONS UNIT DESCRIPTION 20,000 gallon Underground Diesel Fuel Storage Tank #1

DATE INSTALLED 1988

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	N/A	< 0.01	N/A	< 0.01
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination BAT is compliance with the applicable OAC rules and specified allowable and throughput limitation, record keeping, and reporting requirements.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators. CITY/TWP Dayton

SIC CODE 8062 SCC CODE 4-04-004-13;4-04-004-14 EMISSIONS UNIT ID T002

EMISSIONS UNIT DESCRIPTION 20,000 gallon Underground Diesel Fuel Storage Tank #2

DATE INSTALLED 1988

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	N/A	< 0.01	N/A	< 0.01
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination BAT is compliance with the applicable OAC rules and specified allowable and throughput limitation, record keeping, and reporting requirements.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators. CITY/TWP Dayton

SIC CODE 8062 SCC CODE 4-04-004-13;4-04-004-14 EMISSIONS UNIT ID T003

EMISSIONS UNIT DESCRIPTION 20,000 gallon Underground Diesel Fuel Storage Tank #3

DATE INSTALLED 1988

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	N/A	< 0.01	N/A	< 0.01
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination BAT is compliance with the applicable OAC rules and specified allowable and throughput limitation, record keeping, and reporting requirements.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators. CITY/TWP Dayton

SIC CODE 8062 SCC CODE 4-04-004-13;4-04-004-14 EMISSIONS UNIT ID T004

EMISSIONS UNIT DESCRIPTION 20,000 gallon Underground Diesel Fuel Storage Tank #4

DATE INSTALLED 1988

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	N/A	< 0.01	N/A	< 0.01
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination BAT is compliance with the applicable OAC rules and specified allowable and throughput limitation, record keeping, and reporting requirements.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators. CITY/TWP Dayton

SIC CODE 8062 SCC CODE 4-04-004-13;4-04-004-14 EMISSIONS UNIT ID T005

EMISSIONS UNIT DESCRIPTION 20,000 gallon Underground Diesel Fuel Storage Tank #5

DATE INSTALLED 1988

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	attainment	N/A	< 0.01	N/A	< 0.01
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination BAT is compliance with the applicable OAC rules and specified allowable and throughput limitation, record keeping, and reporting requirements.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

Tanks 3.1 Emissions Report

Please provide any additional permit specific notes as you deem necessary:

NONE

Permit To Install Synthetic Minor Write-Up

Source/Facility Description Franciscan Medical Center is a general hospital for medical and surgical needs. This facility is located in Dayton, Montgomery County, which is designated as attainment for sulfur dioxide and ozone.

New Source Emissions The proposed permit is to permit 5 underground storage tanks previously installed and incorporates the SO2 potential emissions generated from the 13 boilers and 2 emergency generators located on site (which are exempt from permitting per OAC rule 3745-31-03(A)(1)(a).

New Source Potential to Emit The tanks are all 20,000 gallons and have potential emissions of 11.51 lbs/yr individually, based on the TANKS 3.1 software. Potential emissions from the fuel burning equipment at this facility is 153.28 TPY for SO2 and 84.01 TPY for NOx based on natural gas and 37.08 TPY for CO based on natural gas in the boilers. These numbers are based upon the rated capacity of the individual boilers and generators, the AP-42 emission factor of 0.0568 lb SO2/gal fuel, and the maximum operating schedule of 8,760 hrs.

Limiting PTE: Federal Enforceability This permit puts an annual throughput limitation of no. 2 fuel oil on the storage tanks. By way of limiting the throughput of no. 2 fuel oil through the facility, we indirectly accomplish a dual limitation of 79.52 TPY SO2. The monthly record keeping of no. 2 fuel oil throughput and the corresponding SO2 emissions requirements reflect that short term enforceability will be assured.

Conclusion By effectively limiting the PTE to 79.52 TPY SO2 by way of federally enforceable terms and conditions, the application does not trigger Title V review.

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
VOC	< 0.05
SO2	79.52

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

NSR Discussion

PTI 08-04120d is for 13 boilers all under 10 mmBtu/hr, 2 emergency generators, and 5 underground storage tanks to store diesel fuel for Franciscan Medical Center. Franciscan Medical Center is a hospital serving general medicine and surgical care. This facility is located in Montgomery County which is currently in attainment for all the criteria pollutants. This PTI is a synthetic minor, to avoid a Title V permit, to indirectly limit the SO2 emissions to 79.52 TPY by limiting the No. 2 fuel oil throughput of the storage tanks.

The 13 boilers primarily use natural gas, but have the capacity of using No. 2 fuel oil in an emergency situation. When calculating the potential to emit from the boilers and the 2 emergency generators using No. 2 fuel oil, this facility has a potential SO2 emission rate of 153.28 TPY. When the boilers are using the natural gas the potential SO2 emissions are 3.77 TPY. This PTI will include an operational restriction of 2,800,000 gallons/yr, as a rolling, 12-month summation of no. 2 fuel oil for the emissions units T001 - T005 combined. By limiting the storage tanks to only 2,800,000 gallons per year, the 13 boilers and 2 emergency generators' SO2 emissions are indirectly limited to 79.52 TPY for the facility.

Terms and conditions for the boilers and generators were not written since the sources are all exempt from PTI requirements under OAC rule 3745-31-03. Also, the operational restriction of the tanks indirectly limits the amount of SO2 that can be generated and so the rolling limitation was placed within the tanks' terms and conditions. The SO2 emissions were the only pollutant of concern when evaluating the facility for all criteria pollutants, therefore limitations were not established for any other pollutants released from the boilers.

The five underground storage tanks were also given their maximum possible emissions based on the Tanks 3.1 program. The TANKS 4.0 software originally used during this review is no longer acceptable to use according to the USEPA website due to possible malfunctions and the site specified TANKS 3.1 is to be used. The consultant and lawyer representing Franciscan did question the applicability of the NSPS to these storage tanks. Our interpretation of 60.110b(c) is that the only requirements for a 20,000 gallon storage tank containing No. 2 fuel oil (VP of 0.003792 kPa) is to keep records of the dimension and capacity analysis as specified under 60.116(a) and (b), but is nevertheless, subject to the NSPS. Therefore, although these tanks emit less than 1 TPY they cannot be "de minimis" and includes the NSPS citation because they are subject to the NSPS, subpart Kb and these terms and conditions are the means to establishing facility-wide limitations for SO2.

The applicable rules are OAC rules 3745-31-05(A)(3), 3745-35-07(B), 3745-21-09(L) and the federal NSPS, Subpart Kb. BAT is compliance with the applicable OAC rules, specified allowable and throughput limitations, record keeping, and reporting requirements.

Prepared by: Maria Cruset
Date: March 17, 2000

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

Calculations

1) Boiler Emissions

No. 2 Fuel Oil Emissions
AP-42 Table 1.3-1 and 1.3-3 (9/98)

Potential SO2 Emissions - Oil

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 62.82 gals oil/hr

62.82 gals oil/hr X 8760 hrs/yr = 550,303 gals oil/yr

(142 (0.4) lb SO2/1000 gal) X 550,303 gals oil/yr = 31,257.21 lbs SO2/yr = 15.63 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 11.42 gals oil/hr

11.42 gals oil/hr X 8760 hrs/yr = 100,039.2 gals oil/yr

(142 (0.4) lb SO2/1000 gal) X 100,039.2 gals oil/yr = 5682.23 lbs SO2/yr = 2.84 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 59.96 gals oil/hr

59.96 gals oil/hr X 8760 hrs/yr = 525,251.08 gals oil/yr

(142 (0.4) lb SO2/1000 gal) X 525,251 gals oil/yr = 29,834.25 lbs SO2/yr = 14.92 TPY

14.92 TPY X 3 = 44.75 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 44.97 gals oil/hr

44.97 gals oil/hr X 8760 hrs/yr = 393,938 gals oil/yr

(142 (0.4) lb SO2/1000 gal) X 393,938 gals oil/yr = 22,375.68 lbs SO2/yr = 11.19 TPY

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.

CITY/TWP Dayton

11.19 TPY X 8 = 89.50 TPY

Total Potential SO2 Emissions

15.63 + 2.84 + 44.75 + 89.50 = 152.72 TPY SO2

Potential NOx Emissions - Oil

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 62.82 gals oil/hr

62.82 gals oil/hr X 8760 hrs/yr = 550,303 gals oil/yr

(20 lbs NOx/1000 gal) X 550,303 gals/yr = 11,006.06 lbs/yr = 5.50 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 11.42 gals oil/hr

11.42 gals oil/hr X 8760 hrs/yr = 100,039.2 gals oil/yr

(20 lbs NOx/1000 gals) X 100,039.2 gals/yr = 2000.78 lbs/yr = 1.00 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 59.96 gals oil/hr

59.96 gals oil/hr X 8760 hrs/yr = 525,251.08 gals oil/yr

(20 lbs NOx/1000 gals) X 525,251.08 gals/yr = 10,505.02 lbs/yr = 5.25 TPY

5.25 X 3 = 15.75 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 44.97 gals oil/hr

44.97 gals oil/hr X 8760 hrs/yr = 393,938 gals oil/yr

(20 lbs NOx/1000 gals) X 393,938 gals/yr = 7878.76 lbs/yr = 3.94 TPY

3.94 X 8 = 31.52 TPY

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

Total Potential NOx Emissions

5.50 + 1.00 + 15.75 + 31.52 = 53.77 TPY

Potential CO Emissions - Oil

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 62.82 gals oil/hr

62.82 gals oil/hr X 8760 hrs/yr = 550,303 gals oil/yr

5 lbs CO/1000 gal) X 550,303 gals/yr = 2751.52 lbs/yr = 1.38 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 11.42 gals oil/hr

11.42 gals oil/hr X 8760 hrs/yr = 100,039.2 gals oil/yr

(5 lbs CO /1000 gal) X 100,039.2 gals oil/yr = 500.20 lbs/yr = 0.25 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 59.96 gals oil/hr

59.96 gals oil/hr X 8760 hrs/yr = 525,251.08 gals oil/yr

(5 lbs CO/1000 gals) X 525,251.08 gals/yr = 2626.26 lbs/yr = 1.31 TPY

1.31 X 3 = 3.93 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 44.97 gals oil/hr

44.97 gals oil/hr X 8760 hrs/yr = 393,938 gals oil/yr

(5 lbs CO/1000 gal) X 393,938 gals oil/yr = 1939.69 lbs/yr = 0.98 TPY

0.98 TPY X 8 = 7.88 TPY

Total Potential CO Emissions

1.38 + 0.25 + 3.93 + 7.88 = 13.44 TPY

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

Potential Particulate Emissions - Oil

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 62.82 gals oil/hr

62.82 gals oil/hr X 8760 hrs/yr = 550,303 gals oil/yr

(2 lbs part/1000 gal) X 550,303 gals/yr = 1100.61 lbs/yr = 0.55 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 11.42 gals oil/hr

11.42 gals oil/hr X 8760 hrs/yr = 100,039.2 gals oil/yr

(2 lbs part/1000 gal) X 100,039.2 gals oil/yr = 200.08 lbs/yr = 0.10 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 59.96 gals oil/hr

59.96 gals oil/hr X 8760 hrs/yr = 525,251.08 gals oil/yr

(2 lbs part/1000 gals) X 525,251.08 gals/yr = 1050.50 lbs/yr = 0.53 TPY

0.53 X 3 = 1.58 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 44.97 gals oil/hr

44.97 gals oil/hr X 8760 hrs/yr = 393,938 gals oil/yr

(2 lbs part/1000 gal) X 393,938 gals oil/yr = 787.88 lbs/yr = 0.39 TPY

0.39 TPY X 8 = 3.15 TPY

Total Potential Particulate Emissions

0.55 + 0.10 + 1.58 + 3.15 = 5.38 TPY

** Note: See the potential particulate emissions allowed under the SIP calculated below

Potential VOC Emissions - Oil

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 62.82 gals oil/hr

62.82 gals oil/hr X 8760 hrs/yr = 550,303 gals oil/yr

(0.556 lbs VOC/1000 gal) X 550,303 gals/yr = 305.97 lbs/yr = 0.15 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 11.42 gals oil/hr

11.42 gals oil/hr X 8760 hrs/yr = 100,039.2 gals oil/yr

(0.556 lbs VOC/1000 gal) X 100,039.2 gals oil/yr = 55.62 lbs/yr = 0.03 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 59.96 gals oil/hr

59.96 gals oil/hr X 8760 hrs/yr = 525,251.08 gals oil/yr

(0.556 lbs VOC/1000 gals) X 525,251.08 gals/yr = 292.04 lbs/yr = 0.15 TPY

0.15 X 3 = 0.45 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X gal/140,093 Btu = 44.97 gals oil/hr

44.97 gals oil/hr X 8760 hrs/yr = 393,938 gals oil/yr

(0.556 lbs VOC/1000 gal) X 393,938 gals oil/yr = 219.03 lbs/yr = 0.11 TPY

0.11 TPY X 8 = 0.88 TPY

Total Potential VOC Emissions

0.15 + 0.03 + 0.15 + 0.11 = 0.44 TPY

Natural Gas Emissions
AP-42 Table 1.4-1 (7/98) and 1.4-2 (2/98)

Potential SO2 Emissions - Natural Gas

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8585.37 scf natural gas/hr

8585.37 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 75.21 scf gas/yr

0.6 lb SO2/mm scf X 75.21 scf natural gas/yr = 45.12 lbs SO2/yr = 0.02 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 1560.98 scf natural gas/hr

1560.98 scf natural gas/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 13.67 scf gas/yr

0.6 lb SO2/mm scf X 13.67 scf natural gas/yr = 8.2 lbs SO2/yr = 0.004 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8195.12 scf natural gas/hr

8195.12 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 71.79 scf gas/yr

0.6 lb SO2/mm scf X 71.79 scf natural gas/yr = 43.07 lbs SO2/yr = 0.02 TPY

0.02 X 3 = 0.06 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 6146.34 scf natural gas/hr

6146.34 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 53.84 scf natural gas/yr

0.6 lb SO2/mm scf X 53.84 scf natural gas/yr = 32.31 lbs SO2/yr = 0.016 TPY

0.016 X 8 = 0.128 TPY

Total Potential SO2 Emissions

0.02 + 0.004 + 0.06 + 0.128 = 0.21 TPY

Potential NOx Emissions - Natural Gas

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8585.37 scf natural gas/hr

8585.37 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 75.21 mm scf gas/yr

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators. CITY/TWP Dayton

100 lbs NOx/mm scf X 75.21 mm scf natural gas/yr = 7521.0 lbs NOx/yr = 3.76 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 1560.98 scf natural gas/hr

1560.98 scf natural gas/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 13.67 scf gas/yr

100 lbs NOx/mm scf X 13.67 scf natural gas/yr = 1367.41 lbs NOx/yr = 0.68 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8195.12 scf natural gas/hr

8195.12 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 71.79 scf gas/yr

100 lbs NOx/mm scf X 71.79 scf natural gas/yr = 7179.0 lbs NOx/yr = 3.59 TPY

3.59 X 3 = 10.77 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 6146.34 scf natural gas/hr

6146.34 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 53.84 scf natural gas/yr

100 lbs NOx/mm scf X 53.84 scf natural gas/yr = 5384.0 lbs NOx/yr = 2.69 TPY

2.69 X 8 = 21.54 TPY

Total Potential NOx Emissions

3.76 + 0.68 + 10.77 + 21.54 = 36.75 TPY

Potential CO Emissions

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8585.37 scf natural gas/hr

8585.37 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 75.21 scf gas/yr

84 lbs CO/mm scf X 75.21 scf natural gas/yr = 6317.64 lbs CO/yr = 3.16 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 1560.98 scf natural gas/hr

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

1560.98 scf natural gas/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 13.67 scf gas/yr

84 lbs NOx/mm scf X 13.67 scf natural gas/yr = 1148.28 lbs CO/yr = 0.57 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8195.12 scf natural gas/hr

8195.12 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 71.79 scf gas/yr

84 lbs CO/mm scf X 71.79 scf natural gas/yr = 6030.36 lbs CO/yr = 3.02 TPY

3.02 X 3 = 9.06 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 6146.34 scf natural gas/hr

6146.34 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 53.84 mm scf gas/yr

84 lbs CO/mm scf X 53.84 mm scf natural gas/yr = 4522.46 lbs CO/yr = 2.26 TPY

2.26 X 8 = 18.09 TPY

Total Potential CO Emissions

3.16 + 0.57 + 9.06 + 18.09 = 30.88 TPY

Potential Particulate Emissions - Natural Gas

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8585.37 scf natural gas/hr

8585.37 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 75.21 mm scf gas/yr

1.9 lbs part/mm scf X 75.21 mm scf natural gas/yr = 142.90 lbs part/yr = 0.07 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 1560.98 scf natural gas/hr

1560.98 scf natural gas/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 13.67 scf gas/yr

1.9 lbs part/mm scf X 13.67 scf natural gas/yr = 25.98 lbs part/yr = 0.01 TPY

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8195.12 scf natural gas/hr

8195.12 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 71.79 scf gas/yr

1.9 lbs part/mm scf X 71.79 scf natural gas/yr = 136.40 lbs part/yr = 0.068 TPY

0.068 X 3 = 0.204 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 6146.34 scf natural gas/hr

6146.34 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 53.84 mm scf gas/yr

1.9 lbs part/mm scf X 53.84 mm scf natural gas/yr = 102.30 lbs part/yr = 0.05 TPY

0.05 X 8 = 0.41 TPY

Total Potential Particulate Emissions

0.07 + 0.01 + 0.204 + 0.41 = 0.694 TPY

** Note: See the potential particulate emissions allowed under the SIP calculated below

Potential VOC Emissions - Natural Gas

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8585.37 scf natural gas/hr

8585.37 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 75.21 mm scf gas/yr

5.5 lbs VOC/mm scf X 75.21 mm scf natural gas/yr = 413.66 lbs VOC/yr = 0.21 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 1560.98 scf natural gas/hr

1560.98 scf natural gas/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 13.67 scf gas/yr

5.5 lbs VOC/mm scf X 13.67 scf natural gas/yr = 75.19 lbs VOC/yr = 0.04 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 8195.12 scf natural gas/hr

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

8195.12 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 71.79 scf gas/yr

5.5 lbs VOC/mm scf X 71.79 scf natural gas/yr = 394.85 lbs VOC/yr = 0.20 TPY

0.020 X 3 = 0.06 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X (1 X 10^6) Btu/mmBtu X scf/1025 Btu = 6146.34 scf natural gas/hr

6146.34 scf/hr X 8760 hrs/yr X mm scf/(1 X 10^6) scf = 53.84 mm scf gas/yr

5.5 lbs VOC/mm scf X 53.84 mm scf natural gas/yr = 296.12 lbs VOC/yr = 0.15 TPY

0.15 X 8 = 1.18 TPY

Total Potential VOC Emissions

0.21 + 0.04 + 0.06 + 1.18 = 1.49 TPY

PARTICULATE EMISSIONS

Under 3745-17-10 (B), the boilers are allowed 0.020 lb part/mmBtu. Therefore, the maximum particulate emissions would be allowed:

NW Boiler #1 - 8.8 mmBtu/hr

8.8 mmBtu/hr X 0.020 lb/mmBtu = 0.176 lbs/hr

0.176 lbs/hr X 8760 hrs/yr = 1541.76 lbs/yr = 0.77 TPY

NW Boiler #2 - 1.6 mmBtu/hr

1.6 mmBtu/hr X 0.020 lb/mmBtu = 0.032 lbs/hr

0.032 lbs/hr X 8760 hrs/yr = 280.32 lbs/yr = 0.14 TPY

WP Boiler #1, WP Boiler #2, and WP Boiler #3 - 8.40 mmBtu/hr

8.4 mmBtu/hr X 0.020 lb/mmBtu = 0.168 lbs/hr

0.168 lbs/hr X 8760 hrs/yr = 1471.68 lbs/yr = 0.74 TPY

0.74 TPY X 3 = 2.21 TPY

SW Boiler #1, SW Boiler #2, SW Boiler #3, SW Boiler #4, SW Boiler #5, SW Boiler #6, SW Boiler #7, and SW

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

Boiler #8 - 6.3 mmBtu/hr

6.3 mmBtu/hr X 0.020 mmBtu/hr = 0.126 lbs/hr

0.126 lbs/hr X 8760 hrs/yr = 1103.76 lbs/yr = 0.55 TPY

0.55 TPY X 8 =4.42 TPY

Total Potential Particulate Emissions

0.77 + 0.14 + 2.21 + 4.42 = 7.54 TPY

2) Underground Storage Tanks Emissions

Tanks 3.1 program used - Each tank has 11.51 lbs/yr

3) Electrical Generators Emissions

AP-42 Table 3.4-1 for Large Diesel Engines (10/96)

Potential NOx Emissions

2520 hp-hr X 0.024 lb NOx/hr-hr = 60.48 lbs/hr

60.48 lbs/hr X 500 hrs/yr = 30,240 lbs/yr = 15.12 TPY

15.12 X 2 = 30.24 TPY NOx

Potential CO Emissions

2520 hp-hr X 5 X 10^-3 lb CO/hp-hr = 12.6 lbs/hr

12.6 lbs/hr X 500 hrs/yr = 6300 lbs/yr = 3.15 TPY

3.15 X 2 = 6.30 TPY

Potential SO2 Emissions

17.8 mmBtu/hr X 0.40 lb SO2/mmBtu = 7.12 lbs/hr

7.12 lbs/hr X 500 hrs/yr = 3560 lbs/yr = 1.78 TPY

1.78 X 2 = 3.56 TPY

Potential TOC Emissions

2520 hp-hr X 7.05 X 10^-4 = 1.78 lbs/hr

1.78 lbs/hr X 500 hrs/yr = 888.3 lbs/yr = 0.44 TPY

0.44 X 2 = 0.88 TPY

Potential Particulate Emissions

17.8 mmBtu/hr X 0.062 lb particulate/mmBtu = 1.10 lbs/hr

1.10 lbs/hr X 500 hrs/yr = 551.8 lbs/yr = 0.28 TPY

0.28 X 2 = 0.56 TPY

Overall Potential Emissions

NEW SOURCE REVIEW FORM B

PTI Number: 08-04120 Facility ID: 0857040304

FACILITY NAME Franciscan Medical Center

FACILITY DESCRIPTION	natural gas/No. 2 fuel fired boilers less than 10 mmBtu - synthetic minor; underground storage tanks; emergency diesel fuel generators.	CITY/TWP	Dayton

Using Fuel Oil

SO2 - 152.72 + 3.56= 153.28 TPY

NOx - 53.77 + 30.24 = 84.01 TPY

CO - 13.44 + 6.30 = 19.74 TPY

VOC - 0.0020 + 0.44 + 0.88 = 1.32 TPY

Part. - 7.54 + 0.56 = 8.1 TPY

Using Natural Gas

SO2 - 0.21 + 3.56 = 3.77 TPY

NOx - 36.75 + 30.24 = 66.99 TPY

CO - 30.88 + 6.30 = 37.08 TPY

VOC - 1.49 + 0.0020 + 0.88 = 2.37 TPY

Part. - 7.54 + 0.56 = 8.1 TPY

Current Potential Use

550,303 + 100,039 + 1,575,753 + 3,151,504 = 5,377,599 gals oil/yr

Federal Restriction

Limit No. 2 fuel oil to 2.8 million gallons/yr

2,800,000 gals oil/yr X 0.0568 lbs SO2/gal fuel oil = 159,040 lbs SO2/yr

159,040 lbs/yr / 2000 lbs/ton = 79.52 TPY