

Sacred Heart Hospital
Facility ID No.: 0330041
Escambia County

Federally Enforceable Air Operation Permit
Permit No.: 0330041-001-AF

Permitting Authority:
Department of Environmental Protection
Northwest District Office
160 Governmental Center
Pensacola, FL 32501-5794
Telephone: 850/595-8364
Fax: 850/595-8597

Drafted on March 19, 1998

Air Operation Permit
Permit No.: 0330041-001-AF

Table of Contents

Section	Page Number
Placard Page	1
I. Facility Information	2-3
A. Facility Description.	
B. Summary of Emissions Unit ID No(s). and Brief Description(s).	
C. Relevant Documents.	
II. Facility-wide Conditions	4-5
III. Emissions Unit(s) and Conditions	
A. -004 Hospital, Medical & Infectious Waste Incinerator	6-10
B. -003 Three Natural Gas-Fired Boilers (conditional exemption)	11-12
Appendices:	
Appendix I-1, List of Insignificant Emissions Units and/or Activities	
Appendix G-1, General Conditions	
Appendix SS-1, Stack Sampling Facilities	
Table 297.310-1, Calibration Schedule	
Table 1-1, Summary of Air Pollutant Standards and Terms	
Table 2-1, Summary of Compliance Requirements	
Appendix H-1, Permit History / ID Number Changes	

Permittee:
Sacred Heart Hospital

Permit No.: 0330041-001-AF
Facility ID No.: 0330041
SIC Nos.: 80, 8062
Project: Hospital

This Federally Enforceable Air Operation Permit (FESOP) is for the operation of the Hospital located at 5151 N. 9th Avenue, Pensacola,, Escambia County; UTM Coordinates: Zone 16, 480.02 km East and 3372.00 km North; Latitude: 30° 28' 54" North and Longitude: 87° 12' 37" West.

STATEMENT OF BASIS: This air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4 and 62-210. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix G-1, General Conditions
Appendix SS-1, Stack Sampling Facilities
Table 297.310-1, Calibration Schedule

Effective Date: May 28, 1998
Renewal Application Due Date: March 29, 2003
Expiration Date: May 28, 2003

**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

/signed/

Ed K. Middleswart, P.E.
Air Program Administrator

Section I. Facility Information.

Subsection A. Facility Description.

This facility is a hospital. A gas-fired incinerator is used to dispose of hospital, medical and infectious waste from hospital operations. Three natural gas-fired boilers, totaling 56.9 MMBtu/hr heat input, are conditionally exempted under the provisions of Rule 62-210.300(3)(a)2., F.A.C. The facility maintains records to justify this conditional exemption.

This is a synthetic minor source due to self-imposed HAP limitations of 2.17 lb HCl/hr, 9.5 T HCl/yr. Facility-wide actual emissions have been determined to be 0.134 T HCl/yr, 2 TPY PM, 12 TPY SO_x, 46 TPY NO_x, 9 TPY CO, and 1 TPY of VOC emissions. HAP (HCl) and PM emissions are controlled by venturi scrubber.

This source is regulated in accordance with Rules 62-296.310, F.A.C., (General Particulate Emission Limiting Standards), 62-296.320, F.A.C. (General Pollutant Emission Limiting Standards), 62-296.401, F.A.C. (Incinerators), 62-210.300(3)(a)2., F.A.C. (Categorical Exemptions, Steam Generators, less than 100 MMBtu/hr heat input) and 62-297.620(4), F.A.C., (Exceptions and Alternate Requirements).

Also included in this permit are some insignificant emissions units and/or activities. These include general facility cleanup and maintenance, and miscellaneous activities pursuant to operating and maintaining a hospital facility and offices.

Based on the permit application received February 17, 1998, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U.

ID No. Brief Description

-004 Hospital, Medical & Infectious Waste Incinerator

The incinerator is used to dispose of typical hospital waste (Types O through IV) and is manufactured by Simonds Manufacturing Corporation, Model AF-5C, with a design capacity of 1,350 pounds per hour. Smoke and odor are controlled by two-stage burning with a minimum 1800°F in the secondary chamber. Particulate and HCl emissions are controlled by the wet scrubber system manufactured by Advanced Concepts, Inc., Model 7720. The scrubber controls will shut down automatically and lock out any further incinerator loading if there is inappropriate water flow.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix H-1, Permit History / ID Number Changes

These documents are on file with permitting authority:

Air Operating Permit Renewal Application received December 15, 1997

[Note: application flagged source as major due to potential to emit federal-enforceability technicality]

Additional Information Request dated January 5, 1998

Revised (Federally Enforceable State Operating Permit) Application received February 17, 1998

Additional Information Response and Request for boiler categorical exemptions received
March 17, 1998

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX G-1, GENERAL CONDITIONS, is a part of this permit.
2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rules 62-296.320(2) and 62-296.401(1)(b), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]
5. General Pollutant Emission Limiting Standards. Unconfined Particulate Matter Emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - a. Proper collection, containment and disposal of dust generated, and protecting dust containers from wind action which might make dust airborne.
 - b. Removal of particulate matter from buildings or work areas and closing doors on windy days as needed to prevent emissions of unconfined particulate matter.
 - c. Enclosure of, or covering activities or equipment when necessary to prevent emission of unconfined particulate matter.
 - d. Removal of particulate matter from roads and other paved areas under control of the owner or operator to prevent emission of unconfined particulate matter.
 - e. Maintenance of roads, parking areas and yards, and application of water or other dust suppressants to roads, parking areas and yards as necessary to control emissions.[Rule 62-296.320(4)(c)2., F.A.C.; AO17-222665]
6. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

7. Sixty days prior to the expiration date of this operation permit, the Permittee shall submit two permit renewal applications using the current version of the renewal form along with the processing fee established in Rule 62-4.050(4), F.A.C., to the Northwest District office of the Department.

[Rule 62-4.090, F.A.C.]

8. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (850) 595-8364, day or night, and for emergencies involving a significant threat to human health or the environment is (800) 320-0519. For routine business, telephone (850) 595-8364 during normal working hours.

[Rules 62-210.700 and 62-4.130, F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-004 Hospital, Medical & Infectious Waste Incinerator

The incinerator is used to dispose of typical hospital waste and is manufactured by Simonds Manufacturing Corporation, Model AF-5C, design capacity of 1,350 pounds per hour. Smoke and odor are controlled by two-stage burning with a minimum 1800°F in the secondary chamber. Particulate and HCl emissions are controlled by the wet scrubber system manufactured by Advanced Concepts, Inc., model 7720. The scrubber will shut down automatically and lock out any further incinerator loading if there is inappropriate water flow.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Capacity. The maximum allowable charging rate of the incinerator shall not exceed more than 1,350 pounds per hour.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., AC17-202190]

A.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Methods of Operation

A.3. Biological Waste Incineration Facilities. The incinerator is subject to the requirements of Rule 62-296.401(4), F.A.C., which apply to all biological waste incineration facilities.

[Rule 62-296.401(4), F.A.C.]

A.4. Design, Operating and Monitoring Requirements. The incinerator is subject to the following requirements:

a. Any incinerator subject to Rule 62-296.401(4), F.A.C., shall operate with a combustion zone design temperature of no less than 1800 degrees Fahrenheit for at least a 1.0 second gas residence time in the secondary (or last) combustion chamber. Primary chamber and stack shall not be utilized in calculating this residence time.

b. Mechanically fed facilities shall incorporate an air lock system to prevent opening the incinerator to the room environment. The volume of the loading system shall be designed to prevent overcharging thereby assuring complete combustion of the waste.

c. Incineration or ignition of waste shall not begin until the secondary (or last) combustion chamber temperature requirement is attained. All air pollution control and continuous emission monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated. The secondary (or last) combustion chamber temperature requirement shall be maintained until the wastes are completely combusted.

d. Radioactive waste may not be burned in an incinerator subject to this rule unless the incinerator has been issued a Department of Health and Rehabilitative Services (DHRS) license to incinerate radioactive waste or the waste is of such quantity to be exempt in accordance with DHRS Rule 10D-91 or 10D-104.003, F.A.C.

e. Hazardous waste may not be burned in an incinerator subject to this rule unless the incinerator has been issued a hazardous waste permit by the Department or the waste is of such quantity to be exempt in accordance with Chapter 62-730, F.A.C.
[Rule 62-296.401(4)(d), F.A.C.]

A.5. Mode of Operation. The incinerator shall be used only for the combustion of hospital waste from this facility (Type O through Type IV waste).
[Rule 62-4.160(2), F.A.C., AC17-202190]

A.6. Mode of Operation. Scrubber pressure drop and pH shall serve as surrogate parameters and be recorded continuously to ensure compliance with PM and HCl emissions limits. The scrubber pressure drop shall be maintained greater than 35 inches of water and the scrubber pH shall be maintained above 6 in the scrubber recirculation tank. Records of scrubber pressure drop and pH shall be kept for a minimum of two years and be available for Department inspection.
[Rules 62-4.160(2), F.A.C., AC17-202190, plan submitted January 20, 1993, letter March 10, 1993]

A.7. Mode of Operation. Proper operation of this incinerator requires a minimum four-hour cool down period (after the shut down switch has been depressed) to ensure complete burn out.
[Rule 62-4.160(2), F.A.C., AC17-202190, letter March 10, 1993]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. }

A.8. No visible emission (5 percent opacity) are allowed, except that visible emissions not exceeding 20 percent opacity are allowed for up to three minutes in any one hour period.
[Rule 62-296.401(1)(a), F.A.C.,]

- A.9.** The incinerator shall meet the following emissions standards:
- Particulate matter emissions shall not exceed 0.030 grains per dry standard cubic foot of flue gas, corrected to 7% O₂.
 - Hydrochloric acid (HCl) emissions shall not exceed 2.17 pounds per hour.
 - Carbon monoxide (CO) emissions shall not exceed 100 parts per million by volume, dry basis, corrected to 7% O₂ on an hourly average basis.
- [Rules 62-296.401(4)(b) and (d), F.A.C., permittee request for HCl limit]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. }

- A.10. Test Methods and Procedures.** All emissions tests performed pursuant to ensuring the incinerator meets the requirements of Rule 62-296.401(1)(d) and (4), F.A.C., shall comply with the following requirements:
- The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. The VE test shall be conducted for sixty (60) minutes during one of the PM test runs.
 - The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C.
 - The test method for oxygen shall be EPA Method 3 or 3A, incorporated and adopted by reference in Chapter 62-297, F.A.C.
 - The test method for particulate emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.
 - The test method for hydrochloric acid shall be EPA Method 26 or 26A, incorporated and adopted by reference in Chapter 62-297, F.A.C.
 - Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
- [Rule 62-296.401(1)(c) and (4)(e), F.A.C.]

- A.11. Frequency of Testing.** The incinerator shall demonstrate individual source compliance with the applicable standards upon initial compliance and annually thereafter before the end of November.
- [Rule 62-296.401(4)(f)2., F.A.C.]

- A.12.** Emissions tests are required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. The Department shall be notified at least 15 days prior to testing to allow witnessing. Results shall be submitted to the Department within 45 days after testing.
- [Rules 62-4.070 and 62-297.310(7), F.A.C.]

- A.13.** The test reports shall comply with applicable portions of Rule 62-297.310, F.A.C., Test Reports. The Department can require special compliance tests in accordance with Rule 62-297.310(7), F.A.C. Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing.
- [Rules 62-297.310(7) and 62-297.620(1), F.A.C.]

A.14. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity. If it is impractical to test at capacity, then sources may be tested at less than 90% of capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department.
[Rules 62-297.310(2) and 62-4.070, F.A.C.]

A.15. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
[Rule 62-297.310(7), F.A.C.; and, SIP approved]

Monitoring of Operations - Continuous Monitoring Requirements

A.16. Continuous Emissions Monitoring Requirements. Each owner or operator of a biological waste incineration facility shall install, operate, and maintain in accordance with the manufacturer's instructions continuous emission monitoring equipment. The monitors shall record the following operating parameters:

- a. Secondary (or last) combustion chamber exit temperature.
- b. Oxygen.

[Rule 62-296.401(4)(g)a., F.A.C.]

Training Requirements

A.17. Training Requirements Any operator of an incinerator subject to Rule 62-296.401(4), F.A.C., shall be trained by the equipment manufacturer's representative or an equivalent organization using a state-approved training program.

a. The content of the training program shall be submitted to the Department for approval. Construction permit applicants shall submit a training program, or reference a previously submitted training program, with the construction permit application. The training shall provide a basic understanding of the principles of the combustion process, provide instruction on proper operating practices and procedures, and increase awareness of regulation requirements and safety concerns. Training programs shall be minimum of 16 hours of instruction. The Department shall approve training programs which meet, at a minimum, the criteria set forth in the EPA Medical Waste Incinerator Operator Training Program Course Handbook EPA 453/B-93-018 and Instructor's Guide EPA 453/B-93-019.

b. A copy of the training certificate for each operator having satisfactorily completed the Department-approved training program must be submitted to the Department within 15 days of training. If the incinerator is modified to the extent that a Department construction permit is required, the operators shall be retrained to operate the modified incinerator. Owners of new and modified incinerators shall submit copies of the operator training certificates within 15 days after completion of the initial compliance test.

c. An operator's certificate must be kept on file at the facility for the duration of the operator's employment and for an additional two years after termination of employment. The owner shall not allow the incinerator to be operated unless it is operated by an operator who has satisfactorily completed the required training program.

[Rule 62-296.401(4)(d), F.A.C.]

Recordkeeping and Reporting Requirements

A.18. A complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations; all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, shall be recorded in a permanent legible form available for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.401(4)(g)2., F.A.C.]

A.19. An annual operating report for air pollutant emitting facility, DEP Form 62-210.990(5), shall be submitted by March 1 of each year. A copy of the form and instructions may be obtained from the Department's Northwest District office.

[Rule 62-210.370, F.A.C.]

MEMORANDUM

TO : Ed K. Middleswart, P.E.
FROM : Andy Allen, Armando Sarasua
DATE : 7/24/2012
SUBJECT : Evaluation Summary for Sacred Heart Hospital, Hospital Incinerator,
0330041-001-AF, Escambia County

We recommend issuing a Federally Enforceable State Operating Permit to Sacred Heart Hospital to operate their Hospital Incinerator. Based on the permit application received February 17, 1998, this facility is not a major source of hazardous air pollutants (HAPs).

Process Description A gas-fired incinerator is used to dispose of hospital, medical and infectious waste from hospital operations. The incinerator is used to dispose of typical hospital waste (Types O through IV) and is manufactured by Simonds Manufacturing Corporation, Model AF-5C, with a design capacity of 1,350 pounds per hour. Three natural gas-fired boilers, using #2 fuel oil for back-up fuel and totaling 56.9 MMBtu/hr heat input, are exempted under the provisions of Rule 62-210.300(3)(a)2., F.A.C..

Also included in this permit are some categorical/exempt emissions units and/or activities. These include general facility cleanup and maintenance, and miscellaneous activities pursuant to operating and maintaining a hospital facility and offices.

Pollution Control Equipment Smoke and odor are controlled by two-stage burning with a minimum 1800 F in the secondary chamber. Particulate and HCl emissions are controlled by a venturi wet scrubber system manufactured by Advanced Concepts, Inc., model 7720. The scrubber controls will shut down automatically and lock out any further incinerator loading if there is inappropriate water flow.

Environmental Impact This is a synthetic minor source due to self-imposed HAP limitations of 2.17 lb HCl/hr, 9.5 T HCl/yr. Facility-wide actual emissions have been determined to be 0.134 T HCl/yr, 2 TPY PM, 12 TPY SO_x, 46 TPY NO_x, 9 TPY CO, and 1 TPY of VOC emissions

Applicable Rules & Regulations This source is regulated in accordance with Rule 62-296.310, F.A.C., (General Particulate Emission Limiting Standards), Rule 62-296.320, F.A.C. (General Pollutant Emission Limiting Standards), Rule 62-296.401, F.A.C. (Incinerators), Rule 62-210.300(3)(a)2., F.A.C. (Categorical Exemptions, Steam Generators, less than 100 MMBtu/hr heat input) and Rule 62-297.620(4), F.A.C., (Exceptions and Alternate Requirements).

Compliance Monitoring Annual compliance testing for VE, PM, O₂, HCl and CO.

Compliance History Incinerator operating permit renewal raised questions that potential to emit HCl put the Hospital in the Major Source category on a technicality of Federal Enforceability. Actual hours of operation and actual HCl emissions presented no such problem. Permittee requested a FESOP to settle the matter.

AIS:asc