TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Health First
8745 N. Wickham Road
Melbourne, FL 32940

Viera Hospital

Facility ID No. 0090230

PROJECT

Project No. 0090230-002-AO
Application for Minor Source Air Operation Permit
Project Name: Initial Air Operation Permit

COUNTY

Brevard County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Central District Office
3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767

December 7, 2011

Prepared by Jeffrey Rustin, P.E.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. <u>Project Description:</u>

A. Applicant:

Mr. Bob Boyd, Project Manager of Construction Dept.
Health First
8745 N. Wickham Road
Melbourne, FL 32940

B. Professional Engineer:

Mr. James Show, P.E.
Grove Scientific and Engineering Company
6140 Edgewater Drive, Suite F
Orlando, FL 32810

C. Project Location:

Viera Hospital
8745 N. Wickham Road
Melbourne, FL 32940

D. Project Summary:

The purpose of this project is issuance of the initial air operation permit for two (2) diesel-fired 1500 kW Emergency Generators and two (2) Steam Boilers.

E. Application Information:

Application Received on: 10/11/2011 (including check)
Application Complete: 10/11/2011

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	Y/N	Comments
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	Facility is not a PSD major source.
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Source of unconfined particulate matter emissions.
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	Y	EU No. 002 is subject to 62-296.406(1), F.A.C. – Fossil Fuel Steam Generators with Less Than 250 MMBtu/hr Heat Input.
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Brevard County is an attainment area for ozone.
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	There is no applicable source category.
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	Y	– EU No. 001 and EU No. 002 are subject to 40 CFR 60, Subpart A, where applicable. – EU No. 001 is subject to 40 CFR 60, Subpart IIII. – EU No. 002 is subject to 40 CFR 60, Subpart Dc.
Rule 62-204.800, F.A.C. National Emission	N	There is no applicable source

Subject to:	Y/N	Comments
Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)		category.
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS – 40 CFR 63)	N	There is no applicable source category.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	Facility is a non-Title V source.
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	VE testing is required for EU No. 001 and only for EU No. 002 if : a. burning gaseous fuel(s) in combination with any amount of liquid fuel(s) for 400 hours or more per year; or b. burning only liquid fuel(s) for 400 hours or more per year.

III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy, opacity)
PM	(2) 1500kW Emergency Generators	0.72	
	(2) 350 HP Steam Boilers	0.91	
	Total	**1.63**	
VOC	(2) 1500kW Emergency Generators	0.65	
	(2) 350 HP Steam Boilers	0.65	
	Total	**1.30**	
NOx	(2) 1500kW Emergency Generators	22.98	
	(2) 350 HP Steam Boilers	11.94	
	Total	**34.92**	
SO2	(2) 1500kW Emergency Generators	0.01	
	(2) 350 HP Steam Boilers	0.07	
	Total	**0.08**	
CO	(2) 1500kW Emergency Generators	6.10	
	(2) 350 HP Steam Boilers	9.99	
	Total	**16.09**	
Total HAP	(2) 1500kW Emergency Generators	0.03	

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy, opacity)
	(2) 350 HP Steam Boilers	0.22	
	Total	**0.25**	
VE	(2) 1500kW Emergency Generators		20%
	(2) 350 HP Steam Boilers		20%

IV. Federal NSPS and/or NESHAP Provisions

A. NSPS, 40 CFR 60 Subpart A, General Provisions

B. NSPS, 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

C. NSPS, 40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

VI. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C. The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

VII. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Central District, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).