TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Lakeland Regional Medical Center
1324 Lakeland Hills Blvd.
Lakeland, Florida 33804

Facility ID No. 1050095

PROJECT

Project No. 1050095-010-AF
Application for Federally Enforceable State Operating Permit (FESOP)
Project Name: Facility Opts Out of Title V and Operation Permit Renewal

COUNTY

Polk County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District Office
Temple Terrace, Florida 33637-7600

April 20, 2011

Prepared by Danny Stubbs

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. Hugh Autry, Senior Vice President
Lakeland Regional Medical Center
1324 Lakeland Hills Blvd.
Lakeland, Florida 33804

B. Professional Engineer:
Mr. Kenneth Given
Air Testing & Consulting, Inc.
333 N. Falkenburg Rd., Unit B-214
Tampa, Florida 33619

C. Project Location:
The facility is located in Polk County at 1324 Lakeland Hills Blvd., Lakeland, Florida.

D. Project Summary:
The purpose of this project is to renew the facility's operation permit and to establish federally enforceable limitations on the facility and affected emissions units that will effectively change the status of the facility to non-TV. This facility previously operated hospital/medical/infectious waste incinerator and was permitted as a Title V facility. The hospital/medical/infectious waste incinerator was permanently shut down on March 1, 2011, and as a result, the facility is no longer a Title V source.

E. Application Information:

Application Received on: 2/28/2011
Application Complete: 3/30/2011

II. Rule Applicability

This project is subject to the 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 62-210.300, F.A.C. - Project Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C.	Y	Not exempt from general permitting requirements.
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	This facility is not a PSD major source.
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	This facility is a source of Particulate matter.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	This facility is source of VOC emission.
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	Y	EU No. 005 is subject to Rule 62-296.406, F.A.C.
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Not applicable
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	Not applicable
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	Y	EU No. 005 is subject to 40 CFR 60, Subpart Dc EU No. 007 is subject to 40 CFR 60, Subpart IIII
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	N	No applicable source category

Subject to:	Y/N	Comments
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)	Y	EU No. 006 is subject to 40 CFR 63, Subparts ZZZZ and EU Nos. 004 and 005 are subject to 40 CFR 63, JJJJJJ
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	This facility is a synthetic 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. 005.

III. Summary of Emissions:

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy)
PM	**004** - 750 HP Kewanee Boiler (Exempt)	0.8	
	005 - 750 HP Johnson Boiler	0.8	
	006 - 200 kW Diesel Fired Generator - 1500 kW Diesel Fired Generators (5 units combined) - 500 kW Diesel Fired Generator	0.007 0.497 0.007	
	007 - 1502 HP Diesel Fired Emergency Generator	0.192	
	PM Total	**2.3**	
VOC	**004** - 750 HP Kewanee Boiler (Exempt)	0.58	
	005 - 750 HP Johnson Boiler	0.58	
	006 - 200 kW Diesel Fired Generator - 1500 kW Diesel Fired Generators (5 units combined) - 500 kW Diesel Fired Generator	0.016 0.258 0.004	
	007 - 1502 HP Diesel Fired Emergency Generator	0.130	
	VOC Total	**1.57**	
NOx	**004** - 750 HP Kewanee Boiler (Exempt)	10.51	
	005 - 750 HP Johnson Boiler	10.51	
	006 - 200 kW Diesel Fired Generator - 1500 kW Diesel Fired Generators (5 units combined) - 500 kW Diesel Fired Generator	0.372 67.947 2.118	
	007 - 1502 HP Diesel Fired Emergency Generator	7.243	
	NOx Total	**98.7**	
SO2	**004** - 750 HP Kewanee Boiler (Exempt)	---	
	005 - 750 HP Johnson Boiler	5.33	

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy)
	006 - 200 kW Diesel Fired Generator - 1500 kW Diesel Fired Generators (5 units combined) - 500 kW Diesel Fired Generator	0.04 0.31 0.023	
	007 - 1502 HP Diesel Fired Emergency Generator	0.046	
	SO2 Total	**5.7**	
CO	**004** - 750 HP Kewanee Boiler (Exempt)	8.83	
	005 - 750 HP Johnson Boiler	8.83	
	006 - 200 kW Diesel Fired Generator - 1500 kW Diesel Fired Generators (5 units combined) - 500 kW Diesel Fired Generator	0.049 9.107 1.056	
	007 - 1502 HP Diesel Fired Emergency Generator	1.056	
	CO Total	**28.9**	
VE	005		20% opacity

Notes:

1. Potential emissions calculations were submitted in a letter from the applicant dated April 1, 2011. In the calculations for the two boilers, potential emissions for the pollutant, SOx were determined assuming the boilers were fired with fuel oil while potential emissions for PM, NOx, VOC and CO were calculated assuming the boilers were fired with natural gas.
2. The applicant requested in the April 1, 2011 letter, that fuel oil usage for the two boilers to be limited to a combined total of 1,500,000 gallons/year. This limit reduces the combined NOx emissions of the two boilers from 32 tpy to 15 tpy when fired with diesel and allows the applicant to escape Title V. The limit results in SO_2 emissions of 5.88 tpy for the two boilers combined.
3. Calculations for all emergency diesel generators were based on a maximum hours of operation of 500 hr/year per generator.

IV. 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.

V. 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, Southwest District 13051 North Telecom Parkway, Temple Terrace, Florida 33637-7600.

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).