TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

I. GENERAL INFORMATION

A. APPLICANT

Florida Gas Transmission Company
Compressor Station No. 16
Post Office Box 4657
Houston, Texas 77251

Permit No.: 0070012-011-AC &
0070012-010-AV
County: Bradford

B. PROJECT

On December 28, 2005, the Department received an Application For Air Construction Permit & Air Permit Title V Source for Florida Gas Transmission Company- Compressor Station No. 16. The applicant requested a construction permit to revise the Particulate Matter/ PM_{10} and SO_2 emission limits for emission unit 003 (Engine No. 1607).

II. RULE APPLICABILITY AND TECHNICAL EVALUATION

This facility is subject to regulation under: New Source Performance Standards 40 CFR 60- General Provisions, Appendix A- adopted and incorporated by reference in Rule 62-204.800, F.A.C., New Source Performance Standards 40 CFR 60, Subpart GG- Stationary Gas Fired Turbines; NSPS 40 CFR 60, Appendix A, adopted by reference in Rule 62-204.800, F.A.C., Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-161; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated May 8, 1991;

EU003: Visible Emissions of <20% Opacity are permitted.
EU003: Hours of operation are not limited: 8,760 hour per year. Except for startup and shutdown, operation below 50% base load is prohibited.

Compliance:

EU003: Compliance will be determined by an annual Visible emissions test using EPA Method 9: Rule 62- 97.310(4)2, F.A.C.
EU 003: Compliance with the SO_2 emissions limit can be demonstrated by calculations based on fuel analysis using ASTM D1072-80, D3031-81, D4084-82, or D3246-81 for sulfur content of gaseous fuels.
EU003: PM/PM_{10} and SO_2 compliance shall be demonstrated on an annual basis.
EU003: CO and NO_x emissions shall be tested concurrently at permitted capacity.

EU 003: One engine No. 1607 rated at 7009 bhp fired by natural gas, installed as a compressor and manufactured by Cooper-Rolls Model 501-KC7-DLE.

New PM and SO2 emission for EU003:

Pollutant	Standards		Maximum Emissions		Rule Basis
	Limit	Units	Lb/hour	TPY	
PM [e]	Good combustion practices		0.45	2.0	Avoid Rule 62-212.400, F.A.C.
SO_2 [b]	10.0	Grains of sulfur per 100 SCF of natural gas	1.87	8.2	Avoid Rule 62-212.400, F.A.C. 40 CFR 60.332

[e] For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum PM emissions were based on data in Table 3.1-2a in AP-42. Regulated VOC emissions were conservatively assumed to be 10% of the manufacturer's estimated emissions for total hydrocarbons. **No testing required.**
[b] The fuel sulfur specification is based on the maximum limit specified by Federal Emergency Regulatory Commission (FERC) and effectively limits the potential SO_2 emissions. Expected fuel sulfur levels are less than 1 grain per 100 SCF of natural gas from the pipeline.

NOTE (1) PM/PM_{10} emissions are minimized by good combustion design with the firing of natural gas as the exclusive fuel.

{Permitting Note: This standard supersedes the previously specified permit limits for PM (TSP and PM_{10}) in all prior Air Construction Permits and all prior Title V Permits concerning EU003, as well as the outdated referenced emission factor. This does not result in any increases in actual or potential emissions of PM. Also this standard supersedes the previously specified permit limits for SO_2 in all prior Air Construction Permits and all prior Title V Permits concerning EU003.}

[Air Construction Permit No. 0070012-011-AC]

III. CONCLUSION

Based upon the information provided by the applicant, the Department has reasonable assurance that the proposed construction permit and Title V Revision to revise the Particulate Matter/ PM_{10} and SO_2 emission limits for emission unit 003, as described in the application and addendums and subject to the conditions proposed herein, will not cause or contribute to a violation of any technical provision of Chapter 297 F.A.C.

PERMIT PROCESSOR LESLIE MAYBIN