



Florida Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

December 9, 1993

Mr. Allan Weatherford
Compliance Environmentalist
Florida Gas Transmission Company
P.O. Box 94500
Maitland, Florida 32794-5100

Dear Mr. Weatherford:

RE: Request for Amendments and Extensions to Air Construction Permits AC 57-188869, AC 67-189220, AC 20-189438, AC 62-189439, AC 04-189454, AC 42-189455, AC 48-189456, AC 05-189655, and AC 56-189457
Phase II - Florida Gas Transmission Company

The Department is in receipt of Mr. Barry Andrew's letter dated December 3, 1993, on behalf of your company, requesting to amend the above permits to use EPA Method 3A instead of EPA Method 3 for Gas Analysis. The Department has reviewed this request and has determined to amend the above mentioned permits as requested.

Specific Condition No. 8 of the above mentioned permits will be amended as follows:

SPECIFIC CONDITION NO. 8

FROM:

8. Compliance with the NO_x, SO₂, CO, VE, and VOC standards shall be determined by the following reference methods as described in 40 CFR 60, Appendix A (July 1, 1988) and adopted by reference in F.A.C. Rule 17-2.700.

- Method 1. Sample and Velocity Traverses
- Method 2. Volumetric Flow Rate
- Method 3. Gas Analysis
- Method 7E. Determination of Nitrogen Oxides Emissions from Stationary Sources
- Method 9. Determination of the Opacity of the Emissions from Stationary Sources
- Method 10. Determination of the Carbon Monoxide Emission from Stationary Sources
- Method 25. Determination of Total Gaseous Nonmethane Organic Emissions as Carbon

Mr. Allan Weatherford
December 9, 1993
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TO:

8. Compliance with the NO_x, SO₂, CO, VE, and VOC standards shall be determined by the following reference methods as described in 40 CFR 60, Appendix A (July 1, 1992) and adopted by reference in F.A.C. Rule 17-2.700.

- Method 1. Sample and Velocity Traverses
- Method 2. Volumetric Flow Rate
- Method 3A. Gas Analysis
- Method 7E. Determination of Nitrogen Oxides Emissions from Stationary Sources
- Method 9. Determination of the Opacity of the Emissions from Stationary Sources
- Method 10. Determination of the Carbon Monoxide Emission from Stationary Sources
- Method 25A. Determination of Total Gaseous Organic Concentrations Using a Flame Ionization Analyses

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;

Mr. Allan Weatherford
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(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

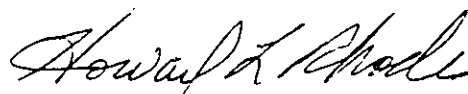
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;

(g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This letter must be attached to the above mentioned permits and shall become a part of each permit.

Sincerely,



Howard Rhodes
Director
Division of Air Resources
Management

Attachment to be Incorporated

Mr. Barry Andrew's letter of December 3, 1993.

cc: E. Middleswart, NWD
Robert Leetch, NED
Charles Collins, CD
Isidore Goldman, SED
Duane Pierce, FGTC
Barry Andrews, ENSR

Mr. Allan Weatherford
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CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 12/21/93 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.

Barbara J. Boutwell
Clerk

12/21/93
Date



ENSR Consulting
and Engineering

2809 West Mall Drive
Florence, AL 35630
(205) 767-1210
FAX (205) 767-1211

December 3, 1993

Mr. Clair Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blairstone Road
Tallahassee, FL 32399-2400

RECEIVED
DEC - 6 1993
Division of Air
Resources Management

Dear Clair:

**RE: Request for Amendments to Permits
Florida Gas Transmission Company**

Station 12 - Permit No. AC57-188869
Munson, Santa Rosa County, Florida

Station 13 - Permit No. AC67-189220
Caryville, Washington county, Florida

Station 14 - Permit No. AC20-189438
Quincy, Gadsden County, Florida

Station 15 - Permit No. AC62-189439
Perry, Taylor County, Florida

Station 16 - Permit No. AC04-189454
Brooker, Bradford County, Florida

Station 17 - Permit No. AC42-189455
Salt Springs, Marion County, Florida

Station 18 - Permit No. AC48-189456
Orlando, Orange County, Florida

Station 19 - Permit No. AC05-189665
Melbourne, Brevard County, Florida

Station 20 - Permit No. AC56-189457
Ft. Pierce, St. Lucie County, Florida



December 3, 1993
Mr. Clair Fancy
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This letter is in response to our recent conversation regarding a previous request by Florida Gas Transmission Company (FGTC) to amend the above permits to include Method 3A instead of Method 3.

On June 29, 1993, FGTC requested that the permits for the compressor engines referenced in this letter be amended to adjust the horsepower ratings and heat input rates. On September 9, 1993 (letter attached), FGTC further requested that specific condition 8 in each of the permits be amended to replace Method 3 with 3A, and that the SO₂ emission limits be clarified to base SO₂ emissions on the fuels sulfur content.

On September 17, 1993 the Division of Air Resources Management (DARM) responded to FGTC's request with a letter amending the permits. Included were the amendments for horsepower ratings, heat input, restrictions, and clarification of sulfur as the basis for SO₂ emissions.

It has recently come to FGTC's attention through the process of obtaining operating permits from the district offices that the request to replace Method 3 with Method 3A was not included in DARM's response. Until now it was assumed that the request had been included in the September 17, 1993 letter of amendment.

Accordingly, FGTC requests that DARM evaluate the request for the amendment to the testing method. This should not require an alternate sampling procedure since there is no regulatory requirement for determining the oxygen and carbon dioxide concentrations from compressor station engines.

Your expedited response to this request is appreciated since it relates to the issuance of our operating permits. Should you need additional information or have any questions please contact Mr. Alan Weatherford with FGTC at (407) 875-5816.

Sincerely,

A handwritten signature in cursive script that reads "Barry Andrews".

Barry D. Andrews, P.E.
Manager, Air Quality Services

cc : Alan Weatherford

Enclosure



Florida Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

September 17, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Weatherford
Compliance Environmentalist
Florida Gas Transmission Company
P. O. Box 94500
Maitland, Florida 32794-5100

Dear Mr. Weatherford:

Re: Request for Amendments and Extensions to Air Construction
Permits AC57-188869, AC67-189220, AC20-189438, AC62-189439,
AC04-189454, AC42-189455, AC48-189456, AC05-189655, and
AC56-189457

The Department is in receipt of your letter dated June 29, 1993, requesting to extend the expiration date and to change the engine horsepower (HP) capacity, fuel consumption and heat input at various compressor stations. The Department has reviewed this request and has determined to amend the above mentioned permits as requested since there is no increase in permitted emission levels (lbs/hr and tons/yr).

The following changes are allowed by the Department:

COMPRESSOR STATION NO. 12 - SANTA ROSA COUNTY:

Description

FROM: For the construction of one 4,000 bhp natural gas fired engine to be located at the Florida Gas Transmission facility in Munson, Santa Rosa County, Florida. The UTM coordinates are Zone 16, 510.83 km East and 3419.03 km North.

TO: For the construction of one 4,100 bhp natural gas fired engine to be located at the Florida Gas Transmission facility in Munson, Santa Rosa County, Florida. The UTM coordinates are Zone 16, 510.83 km East and 3419.03 km North.

Specific Condition No. 1

FROM: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	17.6	77.2	2.0 g/bhp-hr
Carbon Monoxide	22.1	96.6	2.5 g/bhp-hr
Volatile Organic Compounds (non-methane)	8.8	38.6	1.0 g/bhp-hr
Particulate Matter (TSP)	0.14	0.61	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.14	0.61	5 lbs/MMscf
Sulfur Dioxide	0.8	3.5	10 gr/100scf

TO: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	17.6	77.2	1.95 g/bhp-hr
Carbon Monoxide	22.1	96.6	2.44 g/bhp-hr
Volatile Organic Compounds (non-methane)	8.8	38.6	0.97 g/bhp-hr
Particulate Matter (TSP)	0.14	0.61	4.03 lbs/MMscf
Particulate Matter (PM ₁₀)	0.14	0.61	4.03 lbs/MMscf
Sulfur Dioxide	0.8	3.5	8.06 gr/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 27,810 scf/hr.
- Maximum heat input shall not exceed 29.20 MMBtu/hr.

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 34,525 scf/hr.
- Maximum heat input shall not exceed 36.25 MMBtu/hr.

COMPRESSOR STATION NO. 13 - WASHINGTON COUNTY:

Description

FROM: For the construction of one 2,400 bhp natural gas fired engine to be located 9 miles south of Caryville on CR 284. The UTM coordinates are Zone 16, 610.69 km East and 3394.28 km North.

TO: For the construction of one 2,700 bhp natural gas fired engine to be located at the Florida Gas Transmission facility in Caryville, Washington County, Florida. The UTM coordinates are Zone 16, 610.69 km East and 3394.28 km North.

Specific Condition No. 1

FROM: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	2.0 g/bhp-hr
Carbon Monoxide	11.1	48.7	2.1 g/bhp-hr
Volatile Organic Compounds (non-methane)	2.6	11.6	0.5 g/bhp-hr
Particulate Matter (TSP)	0.08	0.4	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.08	0.4	5 lbs/MMscf
Sulfur Dioxide	0.46	2.0	10 gr/100scf

TO: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	1.78 g/bhp-hr
Carbon Monoxide	11.1	48.7	1.87 g/bhp-hr
Volatile Organic Compounds (non-methane)	2.6	11.6	0.44 g/bhp-hr
Particulate Matter (TSP)	0.08	0.4	3.87 lbs/MMscf
Particulate Matter (PM ₁₀)	0.08	0.4	3.87 lbs/MMscf
Sulfur Dioxide	0.46	2.0	7.74 gr 8/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 16,154 scf/hr.
- Maximum heat input shall not exceed 16.80 MMBtu/hr.

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 20,856 scf/hr.
- Maximum heat input shall not exceed 21.69 MMBtu/hr.

COMPRESSOR STATION NO. 14 - GADSDEN COUNTY:

Description

FROM: For the construction of one 2,400 bhp natural gas fired engine to be located 8 miles southwest of Quincy on SR 65. The UTM coordinates are Zone 16, 719.97 km East and 3377.39 km North.

TO: For the construction of one 2,700 bhp natural gas fired engine to be located at the Florida Gas Transmission facility in Quincy, Gadsden County, Florida. The UTM coordinates are Zone 16, 719.97 km East and 3377.39 km North.

Specific Condition No. 1

FROM: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	2.0 g/bhp-hr
Carbon Monoxide	11.1	48.7	2.1 g/bhp-hr
Volatile Organic Compounds (non-methane)	2.6	11.6	0.5 g/bhp-hr
Particulate Matter (TSP)	0.08	0.4	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.08	0.4	5 lbs/MMscf
Sulfur Dioxide	0.46	2.0	10 gr/100scf

TO: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	1.78 g/bhp-hr
Carbon Monoxide	11.1	48.7	1.87 g/bhp-hr

Volatile Organic Compounds (non-methane)	2.6	11.6	0.44 g/bhp-hr
Particulate Matter (TSP)	0.08	0.4	3.87 lbs/MMscf
Particulate Matter (PM ₁₀)	0.08	0.4	3.87 lbs/MMscf
Sulfur Dioxide	0.46	2.0	7.74 gr S/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 16,154 scf/hr.
- Maximum heat input shall not exceed 16.80 MMBtu/hr.

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 20,856 scf/hr.
- Maximum heat input shall not exceed 21.69 MMBtu/hr.

COMPRESSOR STATION NO. 18 - ORANGE COUNTY:

FROM: For the construction of one 2,400 bhp natural gas fired engine to be located at 7990 Steer Lake Road. The UTM coordinates are Zone 17, 451.86 km East and 3154.79 km North.

TO: For the construction of one 2,700 bhp natural gas fired engine to be located at the Florida Gas Transmission facility in Orlando, Orange County, Florida. The UTM coordinates are Zone 16, 451.86 km East and 3154.79 km North.

Specific Condition No. 1

FROM: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	2.0 g/bhp-hr
Carbon Monoxide	11.1	48.7	2.1 g/bhp-hr

Volatile Organic Compounds (non-methane)	2.6	11.6	0.5 g/bhp-hr
Particulate Matter (TSP)	0.08	0.4	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.08	0.4	5 lbs/MMscf
Sulfur Dioxide	0.476	2.2	10 gr/100scf

TO: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

Pollutant	lbs/hr	tons/yr	Emission Factor
Nitrogen Oxides	10.6	46.3	1.78 g/bhp-hr
Carbon Monoxide	11.1	48.7	1.87 g/bhp-hr
Volatile Organic Compounds (non-methane)	2.6	11.6	0.44 g/bhp-hr
Particulate Matter (TSP)	0.08	0.4	3.95 lbs/MMscf
Particulate Matter (PM ₁₀)	0.08	0.4	3.95 lbs/MMscf
Sulfur Dioxide	0.476	2.2	7.90 gr S/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 16,311 scf/hr.
- Maximum heat input shall not exceed 16.80 MMBtu/hr.

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 20,640 scf/hr.
- Maximum heat input shall not exceed 21.26 MMBtu/hr.

COMPRESSOR STATION NO. 19 - BREVARD COUNTY:

Description

FROM: For the construction of two 2,500 bhp natural gas fired engines to be located 6 miles west-southwest of Melbourne Regional Airport. The UTM coordinates are Zone 17, 528.67 km East and 3101.64 km North.

TO: For the construction of two 2,600 bhp natural gas fired engine to be located at the Florida Gas Transmission facility in Melbourne, Brevard County, Florida. The UTM coordinates are Zone 17, 528.67 km East and 3101.64 km North.

Specific Condition No. 1

FROM: The maximum allowable emissions from each engine shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	11.0	48.3	2.0 g/bhp-hr
Carbon Monoxide	15.4	67.6	2.8 g/bhp-hr
Volatile Organic Compounds (non-methane)	9.4	41.0	1.7 g/bhp-hr
Particulate Matter (TSP)	0.09	0.4	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.09	0.4	5 lbs/MMscf
Sulfur Dioxide	0.51	2.2	10 gr/100scf

TO: The maximum allowable emissions from each engine shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	11.0	48.3	1.92 g/bhp-hr
Carbon Monoxide	15.4	67.6	2.69 g/bhp-hr
Volatile Organic Compounds (non-methane)	9.4	41.0	1.64 g/bhp-hr
Particulate Matter (TSP)	0.09	0.4	3.90 lbs/MMscf
Particulate Matter (PM ₁₀)	0.09	0.4	3.90 lbs/MMscf
Sulfur Dioxide	0.51	2.2	7.80 gr S/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for these natural gas compressor engines shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 17,718 scf/hr per engine.
- Maximum heat input shall not exceed 36.50 MMBtu/hr for both engines.

TO: The permitted operating parameters and utilization rates for these natural gas compressor engines shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 22,703 scf/hr per engine.
- Maximum heat input shall not exceed 46.77 MMBtu/hr for both engines.

COMPRESSOR STATION NO. 15 - TAYLOR COUNTY:

Specific Condition No. 1

FROM: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	17.6	77.2	2.0 g/bhp-hr
Carbon Monoxide	22.0	96.6	2.5 g/bhp-hr
Volatile Organic Compounds (non-methane)	8.8	38.6	1.0 g/bhp-hr
Particulate Matter (TSP)	0.13	0.6	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.13	0.6	5 lbs/MMscf
Sulfur Dioxide	0.75	3.3	10 gr/100scf

TO: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	17.6	77.2	2.0 g/bhp-hr
Carbon Monoxide	22.0	96.6	2.5 g/bhp-hr
Volatile Organic Compounds (non-methane)	8.8	38.6	1.0 g/bhp-hr
Particulate Matter (TSP)	0.13	0.6	4.23 lbs/MMscf
Particulate Matter (PM ₁₀)	0.13	0.6	4.23 lbs/MMscf
Sulfur Dioxide	0.75	3.3	8.53 gr S/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 26,154 scf/hr.
- Maximum heat input shall not exceed 27.20 MMBtu/hr.

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 30,943 scf/hr.
- Maximum heat input shall not exceed 32.18 MMBtu/hr.

COMPRESSOR STATION NO. 16 - BRADFORD COUNTY:

Specific Condition No. 1

FROM: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	17.6	77.2	2.0 g/bhp-hr
Carbon Monoxide	22.0	96.6	2.5 g/bhp-hr
Volatile Organic Compounds (non-methane)	8.8	38.6	1.0 g/bhp-hr
Particulate Matter (TSP)	0.13	0.6	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.13	0.6	5 lbs/MMscf
Sulfur Dioxide	0.75	3.3	10 gr/100scf

TO: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	17.6	77.2	2.0 g/bhp-hr
Carbon Monoxide	22.0	96.6	2.5 g/bhp-hr
Volatile Organic Compounds (non-methane)	8.8	38.6	1.0 g/bhp-hr
Particulate Matter (TSP)	0.13	0.6	3.90 lbs/MMscf
Particulate Matter (PM ₁₀)	0.13	0.6	3.90 lbs/MMscf
Sulfur Dioxide	0.75	3.3	7.80 gr S/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 26,408 scf/hr.
- Maximum heat input shall not exceed 27.20 MMBtu/hr.

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 33,833 scf/hr.
- Maximum heat input shall not exceed 34.85 MMBtu/hr.

COMPRESSOR STATION NO. 17 - MARION COUNTY

Specific Condition No. 1

FROM: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	2.0 g/bhp-hr
Carbon Monoxide	14.8	64.9	2.8 g/bhp-hr
Volatile Organic Compounds (non-methane)	9.0	39.4	1.7 g/bhp-hr
Particulate Matter (TSP)	0.09	0.4	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.09	0.4	5 lbs/MMscf
Sulfur Dioxide	0.49	2.2	10 gr/100scf

TO: The maximum allowable emissions from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	2.0 g/bhp-hr
Carbon Monoxide	14.8	64.9	2.8 g/bhp-hr
Volatile Organic Compounds (non-methane)	9.0	39.4	1.7 g/bhp-hr
Particulate Matter (TSP)	0.09	0.4	4.13 lbs/MMscf
Particulate Matter (PM ₁₀)	0.09	0.4	4.13 lbs/MMscf
Sulfur Dioxide	0.49	2.2	8.27 gr S/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 17,010 scf/hr.
- Maximum heat input shall not exceed 17.52 MMBtu/hr.

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 20,569 scf/hr.
- Maximum heat input shall not exceed 21.19 MMBtu/hr.

COMPRESSOR STATION NO. 20 - ST. LUCIE COUNTY

FROM: The maximum allowable emissions from this unit shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	2.0 g/bhp-hr
Carbon Monoxide	14.8	64.9	2.8 g/bhp-hr
Volatile Organic Compounds (non-methane)	9.0	39.4	1.7 g/bhp-hr
Particulate Matter (TSP)	0.09	0.4	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.09	0.4	5 lbs/MMscf
Sulfur Dioxide	0.49	2.0	10 qr/100scf

TO: The maximum allowable emissions from this unit shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides	10.6	46.3	2.0 g/bhp-hr
Carbon Monoxide	14.8	64.9	2.8 g/bhp-hr
Volatile Organic Compounds (non-methane)	9.0	39.4	1.7 g/bhp-hr
Particulate Matter (TSP)	0.09	0.4	4.13 lbs/MMscf
Particulate Matter (PM ₁₀)	0.09	0.4	4.13 lbs/MMscf
Sulfur Dioxide	0.49	2.0	8.27 qr S/100scf

Specific Condition No. 5

FROM: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed 17,010 scf/hr.
- Maximum heat input shall not exceed 17.52 MMBtu/hr.

Mr. Allan Weatherford
Request for Amendments and Extensions
Page 12

TO: The permitted operating parameters and utilization rates for this natural gas compressor engine shall not exceed the values stated in the application. The parameters include, but are not limited to:

- Maximum natural gas consumption shall not exceed **20,569** scf/hr.
- Maximum heat input shall not exceed **21.19** MMBtu/hr.

Expiration Date

The expiration date of the above mentioned permit will be changed from June 30, 1993, to **December 31, 1993.**

This letter must be attached to the above mentioned permits and shall become a part of each permit. If you have any questions, please call Teresa Heron at (904) 488-1344.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/TH/plm

Attachment to be Incorporated:

Mr. Allan Weatherford's letter of June 29, 1993

cc: E. Middleswart, NWD
Robert Leetch, NED
Charles Collins, CD
Isidore Goldman, SED
Duane Pierce, FGTC
Barry Andrews, ENSR

STATION 17

SILVER SPRINGS, FLORIDA

Station	Model Run Factor	MAXIMUM 1-HR CONCENTRATION (ug/m**3)					Maximum Emission (lb/hr)				
		NOx	CO	VOCs	Particulates	SO2	NOx	CO	VOCs	Particulates	SO2
17 Permitted	2.724	28.874	40.315	24.516	0.245	1.335	10.60	14.80	9.00	0.09	0.49
17 Revised	2.234	23.636	33.086	20.084	0.223	1.072	10.58	14.81	8.99	0.10	0.48

Model Run Factor is maximum 1-hr concentration based on emission of 1 lb/hr.

Maximum 1-hr concentrations calculated as (Model Run Factor) X (Maximum Emission).

*** SCREEN-1.1 MODEL RUN ***
*** VERSION DATED 88300 ***

Station 17--Permit--Simple Terrain, no Downwash

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = POINT
EMISSION RATE (G/S) = .1260
STACK HEIGHT (M) = 12.19
STK INSIDE DIAM (M) = .39
STK EXIT VELOCITY (M/S) = 57.39
STK GAS EXIT TEMP (K) = 641.48
AMBIENT AIR TEMP (K) = 293.00
RECEPTOR HEIGHT (M) = .00
IOPT (1=URB,2=RUR) = 2
BUILDING HEIGHT (M) = .00
MIN HORIZ BLDG DIM (M) = .00
MAX HORIZ BLDG DIM (M) = .00

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF .00 M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	0	.0	.0	.0	.0	.0	.0	
100.	.1968	3	10.0	10.2	3200.0	25.3	12.7	7.8	NO
200.	2.465	3	10.0	10.2	3200.0	25.3	23.9	14.4	NO
300.	2.667	3	8.0	8.2	2560.0	28.6	34.6	20.9	NO
400.	2.384	3	5.0	5.1	1600.0	38.4	45.3	27.5	NO
500.	2.315	4	10.0	10.3	3200.0	25.2	36.3	18.7	NO
600.	2.218	4	8.0	8.2	2560.0	28.4	43.0	21.7	NO
700.	2.053	4	8.0	8.2	2560.0	28.4	49.4	24.5	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

252.	2.724	3	10.0	10.2	3200.0	25.3	29.6	17.8	NO
------	-------	---	------	------	--------	------	------	------	----

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	2.724	252.	0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

*** SCREEN-1.1 MODEL RUN ***
*** VERSION DATED 88300 ***

Station 17--Actual--Simple Terrain, no Downwash

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = POINT
EMISSION RATE (G/S) = .1260
STACK HEIGHT (M) = 14.85
STK INSIDE DIAM (M) = .44
STK EXIT VELOCITY (M/S) = 43.62
STK GAS EXIT TEMP (K) = 641.48
AMBIENT AIR TEMP (K) = 293.00
RECEPTOR HEIGHT (M) = .00
IOPT (1=URB,2=RUR) = 2
BUILDING HEIGHT (M) = .00
MIN HORIZ BLDG DIM (M) = .00
MAX HORIZ BLDG DIM (M) = .00

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF .00 M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	0	.0	.0	.0	.0	.0	.0	
100.	.6589E-01	3	10.0	10.4	3200.0	27.7	12.6	7.7	NO
200.	1.778	3	10.0	10.4	3200.0	27.7	23.9	14.4	NO
300.	2.227	3	8.0	8.3	2560.0	30.9	34.6	20.8	NO
400.	2.088	3	5.0	5.2	1600.0	40.5	45.2	27.4	NO
500.	1.997	3	5.0	5.2	1600.0	40.5	55.3	33.3	NO
600.	1.877	4	8.0	8.5	2560.0	30.6	43.0	21.7	NO
700.	1.790	4	8.0	8.5	2560.0	30.6	49.4	24.5	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

314.	2.234	3	8.0	8.3	2560.0	30.9	36.2	21.7	NO
------	-------	---	-----	-----	--------	------	------	------	----

DWASH= MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

 *** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	2.234	314.	0.

 ** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**Air Emissions Estimates for Permitting
Station 17 Silver Springs, FL**

	NOX (TPY)	CO (TPY)	NMHC (TPY)	SO2 (TPY)	PM (TPY)
Engines					
Compressor Engine 1	212.47	27.04	8.50	1.79	0.31
Compressor Engine 2	212.47	27.04	8.50	1.79	0.31
Compressor Engine 3	212.47	27.04	8.50	1.79	0.31
Compressor Engine 4	212.47	27.04	8.50	1.79	0.31
Compressor Engine 5	46.36	64.90	39.40	2.09	0.41
Emergency Generator Engine No. 1	3.83	0.35	0.17	0.02	0.00
Emergency Generator Engine No. 2	3.83	0.35	0.17	0.02	0.00
Air Compressor Engine No. 1	0.13	0.74	0.01	0.00	0.00
Air Compressor Engine No. 2 (Electric)	0.00	0.00	0.00	0.00	0.00
Air Compressor Engine No. 3 (Electric)	0.00	0.00	0.00	0.00	0.00
Tanks					
Oil & Water Separator No. 1	0.00	0.00	0.15	0.00	0.00
Oil & Water Separator No. 2	0.00	0.00	0.14	0.00	0.00
Pipeline Condensate Tank No. 1	0.00	0.00	0.14	0.00	0.00
Lube Oil Storage Tank No. 1	0.00	0.00	0.01	0.00	0.00
Lube Oil Storage Tank No. 2	0.00	0.00	0.00	0.00	0.00
Lube Oil Rundown Tank No. 1	0.00	0.00	0.00	0.00	0.00
Waste Oil Tank No. 1	0.00	0.00	0.00	0.00	0.00
Cleaning Machines					
Parts Cleaner No. 1	0.00	0.00	0.15	0.00	0.00
Parts Cleaner No. 2	0.00	0.00	0.07	0.00	0.00
Paint Cleaner No. 1	0.00	0.00	0.03	0.00	0.00
Blowdown					
ESD and Maintenance Blowdowns	0.00	0.00	1.60	0.00	0.00
Fugitive Emissions					
Fugitive Emissions	0.00	0.00	?	0.00	0.00
Total Emissions (except for "?" indicated items)	904.03	174.50	76.04	9.29	1.65

**Engine Emission Calculation Worksheet
Station 17; Silver Springs, FL**

Emergency Generator Engine 1

Engine data

Annual use (maximum); hr./yr.	400 hr./yr.
Power; Hp	395 Hp
Power; Btu/hr. (@ 8026 (Btu/hr.)/Hp)	3170270 Btu/hr.
Fuel consumption; scf/hr. (@ 1040 Btu/scf)	3048 scf/hr.

Emission factors

NO _x	22.0 g/Hp-hr.
CO	2.0 g/Hp-hr.
NMHC	1.0 g/Hp-hr.
SO ₂	0.1 grains/scf
PM	5.0 lb/MMscf

Calculated emissions

NO _x	3.83 TPY
CO	0.35 TPY
NMHC	0.17 TPY
SO ₂	0.02 TPY
PM	0.00 TPY

**Engine Emission Calculation Worksheet
Station 17; Silver Springs, FL**

Emergency Generator Engine 2

Engine data

Annual use (maximum); hr./yr.	400 hr./yr.
Power; Hp	395 Hp
Power; Btu/hr. (@ 8026 (Btu/hr.)/Hp)	3170270 Btu/hr.
Fuel consumption; scf/hr. (@ 1040 Btu/scf)	3048 scf/hr.

Emission factors

NOx	22.0 g/Hp-hr.
CO	2.0 g/Hp-hr.
NMHC	1.0 g/Hp-hr.
SO2	0.1 grains/scf
PM	5.0 lb/MMscf

Calculated emissions

NOx	3.83 TPY
CO	0.35 TPY
NMHC	0.17 TPY
SO2	0.02 TPY
PM	0.00 TPY

**Engine Emission Calculation Worksheet
Station 17; Silver Springs, FL**

Air Compressor Engine 1

Engine data

Annual use (maximum); hr./yr.	325 hr./yr.
Power; Hp	46 Hp
Power; Btu/hr. (@ 8026 (Btu/hr.)/Hp)	369196 Btu/hr.
Fuel consumption; scf/hr. (@ 1040 Btu/scf)	355 scf/hr.

Emission factors

NOx	8.0 g/Hp-hr.
CO	45.0 g/Hp-hr.
NMHC	0.5 g/Hp-hr.
SO2	0.1 grains/scf
PM	5.0 lb/MMscf

Calculated emissions

NOx	0.13 TPY
CO	0.74 TPY
NMHC	0.01 TPY
SO2	0.00 TPY
PM	0.00 TPY

FIXED ROOF TANK VOLATILE ORGANIC COMPOUND EMISSIONS (Rev. 6/90)

(C) COPYRIGHT 1990, PHOENIX ENGINEERING, INC.

CLIENT: Florida Gas Transmission

DATE: 05/06/93

LOCATION: Station 17

JOB NO:

CALCULATED USING AP-42, FOURTH EDITION SEP. 85, EQUATIONS 4.3-(1)&(2)

TANK PHYSICAL DATA

TANK IDENTIFICATION NUMBER	Oil & Water Separator 1
EMISSION CONTROLS	None
PERCENT EFFICIENCY	0 %
TANK PAINT COLOR	Black
TANK DIAMETER (FT), D	10.0
TANK HEIGHT (FT), H	15.0
PAINT FACTOR, FsubP	1.58
TANK CAPACITY (BBLs), VB	210
TANK CAPACITY (GALLONS), V	8820
ADJUSTMENT FACTOR FOR DIA., C	0.53

WEATHER DATA

	Gainsville	
AVG. DAILY TEMP. CHANGE (DEG F), DeltaT		20.0
STORAGE TEMP. (DEG. F)		73.8
AVG. ATM. PRESS. (PSIA), PsubA		14.7

PRODUCT PHYSICAL DATA

MATERIAL STORED	Oily Wastewater
MOLECULAR WEIGHT (#/#MOLE) MsubV	53.00
VAPOR PRESS. AT STG. TEMP. (DEG. F), P	2.80
PRODUCT FACTOR, KsubC (CRUDE 0.65, OTHER 1.0)	1.00

THROUGHPUT DATA

DAYS IN SERVICE, DsubS	365
VAPOR SPACE HEIGHT (FT), VH	7.50
TANK THROUGHPUT (BBLs FOR DAYS IN SERVICE), TT	369.05
FILLING RATE (BBLs/HR), FR	128.57
NUMBER OF TURNOVERS FOR DAYS IN SERVICE, N	1.8
TURNOVER FACTOR, KsubN	1.00

FIXED ROOF TANK BREATHING LOSS, # LsubB =

$$2.26 \times 10^{-2} * (M_{subV}) * (P / (P_{subA} - P)) \text{ EXP } 0.68 * (D) \text{ EXP } 1.73 * (VH) \text{ EXP } 0.51 * (\Delta T) \text{ EXP } 0.5 * (F_{subP}) * (C) * (K_{subC}) * D_{subS} / 365 * (100 - \% \text{eff}) / 100$$

FIXED ROOF TANK WORKING LOSS, # LsubW =

$$2.4 \text{ EXP } -05 * M_{subV} * P * V * N * K_{subN} * K_{subC} * (100 - \% \text{eff}) / 100$$

VOLATILE ORGANIC COMPOUND LOSSES	BREATHING	WORKING	TOTAL
POUNDS FOR DAYS SERVICE =	252	55	307
TONS FOR DAYS SERVICE =	0.13	0.03	0.15
ANNUALIZED POUNDS =	252	55	307
ANNUALIZED TONS =	0.13	0.03	0.15
POUND/HR (AVG) =	0.03	0.01	0.04
MAXIMUM EMISSION RATE (#/HR) =	0.06	19.26	19.32

FIXED ROOF TANK VOLATILE ORGANIC COMPOUND EMISSIONS (Rev. 6/90)

(C) COPYRIGHT 1990, PHOENIX ENGINEERING, INC.

CLIENT: Florida Gas Transmission

DATE: 04/27/93

LOCATION: Station 17

JOB NO:

CALCULATED USING AP-42, FOURTH EDITION SEP. 85, EQUATIONS 4.3-(1)&(2)

TANK PHYSICAL DATA

TANK IDENTIFICATION NUMBER	Oil & Water Separator 2
EMISSION CONTROLS	None
PERCENT EFFICIENCY	0 %
TANK PAINT COLOR	Black
TANK DIAMETER (FT), D	10.0
TANK HEIGHT (FT), H	15.0
PAINT FACTOR, FsubP	1.58
TANK CAPACITY (BBLs), VB	210
TANK CAPACITY (GALLONS), V	8820
ADJUSTMENT FACTOR FOR DIA., C	0.53

WEATHER DATA

	Gainsville
AVG. DAILY TEMP. CHANGE (DEG F), DeltaT	20.0
STORAGE TEMP. (DEG. F)	73.8
AVG. ATM. PRESS. (PSIA), PsubA	14.7 *

PRODUCT PHYSICAL DATA

MATERIAL STORED	Oily Wastewater
MOLECULAR WEIGHT (#/#MOLE) MsubV	53.00
VAPOR PRESS. AT STG. TEMP. (DEG. F), P	2.80
PRODUCT FACTOR, KsubC (CRUDE 0.65, OTHER 1.0)	1.00

THROUGHPUT DATA

DAYS IN SERVICE, DsubS	365
VAPOR SPACE HEIGHT (FT), VH	7.50
TANK THROUGHPUT (BBLs FOR DAYS IN SERVICE), TT	202.40
FILLING RATE (BBLs/HR), FR	128.60
NUMBER OF TURNOVERS FOR DAYS IN SERVICE, N	1.0
TURNOVER FACTOR, KsubN	1.00

FIXED ROOF TANK BREATHING LOSS, # LsubB =

$$2.26 \times 10^{-2} * (M_{subV}) * (P / (P_{subA} - P)) \text{ EXP } 0.68 * (D) \text{ EXP } 1.73 * (VH) \text{ EXP } 0.51 * (\Delta T) \text{ EXP } 0.5 * (F_{subP}) * (C) * (K_{subC}) * D_{subS} / 365 * (100 - \% \text{eff}) / 100$$

FIXED ROOF TANK WORKING LOSS, # LsubW =

$$2.4 \text{ EXP } -05 * M_{subV} * P * V * N * K_{subN} * K_{subC} * (100 - \% \text{eff}) / 100$$

VOLATILE ORGANIC COMPOUND LOSSES	BREATHING	WORKING	TOTAL
POUNDS FOR DAYS SERVICE =	252	30	282
TONS FOR DAYS SERVICE =	0.13	0.02	0.14
ANNUALIZED POUNDS =	252	30	282
ANNUALIZED TONS =	0.13	0.02	0.14
POUND/HR (AVG) =	0.03	0.00	0.03
MAXIMUM EMISSION RATE (#/HR) =	0.06	19.16	19.22

FIXED ROOF TANK VOLATILE ORGANIC COMPOUND EMISSIONS (Rev. 6/90)

(C) COPYRIGHT 1990, PHOENIX ENGINEERING, INC.

CLIENT: Florida Gas Transmission

DATE: 04/27/93

LOCATION: Station 17

JOB NO:

CALCULATED USING AP-42, FOURTH EDITION SEP. 85, EQUATIONS 4.3-(1)&(2)

TANK PHYSICAL DATA

TANK IDENTIFICATION NUMBER	Condensate 1	
EMISSION CONTROLS	None	
PERCENT EFFICIENCY		0 %
TANK PAINT COLOR	Black	
TANK DIAMETER (FT), D		10.0
TANK HEIGHT (FT), H		15.0
PAINT FACTOR, FsubP		1.58
TANK CAPACITY (BBLs), VB		210
TANK CAPACITY (GALLONS), V		8820
ADJUSTMENT FACTOR FOR DIA., C		0.53

WEATHER DATA

Gainsville

AVG. DAILY TEMP. CHANGE (DEG F), DeltaT	20.0
STORAGE TEMP. (DEG. F)	73.8
AVG. ATM. PRESS. (PSIA), PsubA	14.7

PRODUCT PHYSICAL DATA

MATERIAL STORED	Condensate	
MOLECULAR WEIGHT (#/#MOLE) MsubV		53.00
VAPOR PRESS. AT STG. TEMP. (DEG. F), P		2.80
PRODUCT FACTOR, KsubC (CRUDE 0.65, OTHER 1.0)		1.00

THROUGHPUT DATA

DAYS IN SERVICE, DsubS	365
VAPOR SPACE HEIGHT (FT), VH	7.50
TANK THROUGHPUT (BBLs FOR DAYS IN SERVICE), TT	130.95
FILLING RATE (BBLs/HR), FR	128.60
NUMBER OF TURNOVERS FOR DAYS IN SERVICE, N	0.6
TURNOVER FACTOR, KsubN	1.00

FIXED ROOF TANK BREATHING LOSS, # LsubB =

$$2.26 \times 10^{-2} * (M_{subV}) * (P / (P_{subA} - P)) \text{ EXP } 0.68 * (D) \text{ EXP } 1.73 * (VH) \text{ EXP } 0.51 * (\Delta T) \text{ EXP } 0.5 * (F_{subP}) * (C) * (K_{subC}) * D_{subS} / 365 * (100 - \% \text{eff}) / 100$$

FIXED ROOF TANK WORKING LOSS, # LsubW =

$$2.4 \text{ EXP } -05 * M_{subV} * P * V * N * K_{subN} * K_{subC} * (100 - \% \text{eff}) / 100$$

VOLATILE ORGANIC COMPOUND LOSSES	BREATHING	WORKING	TOTAL
POUNDS FOR DAYS SERVICE =	252	19	271
TONS FOR DAYS SERVICE =	0.13	0.01	0.14
ANNUALIZED POUNDS =	252	19	271
ANNUALIZED TONS =	0.13	0.01	0.14
POUND/HR (AVG) =	0.03	0.00	0.03
MAXIMUM EMISSION RATE (#/HR) =	0.06	19.13	19.18

FIXED ROOF TANK VOLATILE ORGANIC COMPOUND EMISSIONS (Rev. 6/90)

(C) COPYRIGHT 1990, PHOENIX ENGINEERING, INC.

CLIENT: Florida Gas Transmission

DATE: 05/14/93

LOCATION: Station 17

JOB NO:

CALCULATED USING AP-42, FOURTH EDITION SEP. 85, EQUATIONS 4.3-(1)&(2)

TANK PHYSICAL DATA

TANK IDENTIFICATION NUMBER	Lube Oil Storage Tank #1	
EMISSION CONTROLS	None	
PERCENT EFFICIENCY		0 %
TANK PAINT COLOR	White	
TANK DIAMETER (FT), D		17.9
TANK HEIGHT (FT), H		7.0
PAINT FACTOR, FsubP		1.15
TANK CAPACITY (BBLs), VB		238
TANK CAPACITY (GALLONS), V		10000
ADJUSTMENT FACTOR FOR DIA., C		0.83

WEATHER DATA

	Gainsville	
AVG. DAILY TEMP. CHANGE (DEG F), DeltaT		20.0
STORAGE TEMP. (DEG. F)		68.8
AVG. ATM. PRESS. (PSIA), PsubA		14.7

PRODUCT PHYSICAL DATA

MATERIAL STORED	Lube Oil	
MOLECULAR WEIGHT (#/#MOLE) MsubV		190.00
VAPOR PRESS. AT STG. TEMP. (DEG. F), P		0.0019
PRODUCT FACTOR, KsubC (CRUDE 0.65, OTHER 1.0)		1.00

THROUGHPUT DATA

DAYS IN SERVICE, DsubS		365
VAPOR SPACE HEIGHT (FT), VH		3.50
TANK THROUGHPUT (BBLs FOR DAYS IN SERVICE), TT		285.7
FILLING RATE (BBLs/HR), FR		
NUMBER OF TURNOVERS FOR DAYS IN SERVICE, N		1.2
TURNOVER FACTOR, KsubN		1.00

FIXED ROOF TANK BREATHING LOSS, # LsubB =
 $2.26 \times 10^{-2} * (MsubV) * (P / (PsubA - P)) \text{ EXP } 0.68 * (D) \text{ EXP } 1.73 * (VH) \text{ EXP } 0.51 * (\text{DeltaT}) \text{ EXP } 0.5 * (FsubP) * (C) * (KsubC) * DsubS / 365 * (100 - \%eff) / 100$

FIXED ROOF TANK WORKING LOSS, # LsubW =
 $2.4 \text{ EXP} -05 * MsubV * P * V * N * KsubN * KsubC * (100 - \%eff) / 100$

VOLATILE ORGANIC COMPOUND LOSSES	BREATHING	WORKING	TOTAL
POUNDS FOR DAYS SERVICE =	12	0	12
TONS FOR DAYS SERVICE =	0.01	0.00	0.01
ANNUALIZED POUNDS =	12	0	12
ANNUALIZED TONS =	0.01	0.00	0.01
POUND/HR (AVG) =	0.00	0.00	0.00
MAXIMUM EMISSION RATE (#/HR) =			

Effective Diameter for a Horizontal Fixed Roof Tank
(From Supplement E of AP-42)

FGT Station 17
Lube Oil Storage Tank No. 1

Tank Measurements

Length of Tank (ft) - L	36
Actual Diameter of Tank (ft) - D	7

Calculated Values

Effective Tank Diameter (ft) - D_{eff}	17.9
Vapor Space Outage (ft) - H_{vo}	3.5

Equations:

$D_{eff} = \text{SQRT}(L * D / 0.785)$	Equation 1-5 of Chapter 12
$H_{vo} = D / 2$	Equation 1-6 of Chapter 12

FIXED ROOF TANK VOLATILE ORGANIC COMPOUND EMISSIONS (Rev. 6/90)

(C) COPYRIGHT 1990, PHOENIX ENGINEERING, INC.

CLIENT: Florida Gas Transmission

DATE: 05/14/93

LOCATION: Station 17

JOB NO:

CALCULATED USING AP-42, FOURTH EDITION SEP. 85, EQUATIONS 4.3-(1)&(2)

TANK PHYSICAL DATA

TANK IDENTIFICATION NUMBER	Lube Oil Storage Tank #2	
EMISSION CONTROLS	None	
PERCENT EFFICIENCY		0 %
TANK PAINT COLOR	Primer	
TANK DIAMETER (FT), D		12.4
TANK HEIGHT (FT), H		5.0
PAINT FACTOR, FsubP		1.44
TANK CAPACITY (BBLs), VB		84
TANK CAPACITY (GALLONS), V		3528
ADJUSTMENT FACTOR FOR DIA., C		0.65

WEATHER DATA

Gainsville

AVG. DAILY TEMP. CHANGE (DEG F), DeltaT	20.0
STORAGE TEMP. (DEG. F)	73.8
AVG. ATM. PRESS. (PSIA), PsubA	14.7

PRODUCT PHYSICAL DATA

MATERIAL STORED	Lube Oil	
MOLECULAR WEIGHT (#/#MOLE) MsubV		190.00
VAPOR PRESS. AT STG. TEMP. (DEG. F), P		0.0019
PRODUCT FACTOR, KsubC (CRUDE 0.65, OTHER 1.0)		1.00

THROUGHPUT DATA

DAYS IN SERVICE, DsubS	365
VAPOR SPACE HEIGHT (FT), VH	2.50
TANK THROUGHPUT (BBLs FOR DAYS IN SERVICE), TT	95.2
FILLING RATE (BBLs/HR), FR	
NUMBER OF TURNOVERS FOR DAYS IN SERVICE, N	1.14
TURNOVER FACTOR, KsubN	1.00

FIXED ROOF TANK BREATHING LOSS, # LsubB =

$$2.26 \times 10^{-2} * (M_{subV}) * (P / (P_{subA} - P)) \text{ EXP } 0.68 * (D) \text{ EXP } 1.73 * (VH) \text{ EXP } 0.51 * (\Delta T) \text{ EXP } 0.5 * (F_{subP}) * (C) * (K_{subC}) * D_{subS} / 365 * (100 - \% \text{eff}) / 100$$

FIXED ROOF TANK WORKING LOSS, # LsubW =

$$2.4 \text{ EXP } -05 * M_{subV} * P * V * N * K_{subN} * K_{subC} * (100 - \% \text{eff}) / 100$$

VOLATILE ORGANIC COMPOUND LOSSES	BREATHING	WORKING	TOTAL
POUNDS FOR DAYS SERVICE =	5	0	5
TONS FOR DAYS SERVICE =	0.00	0.00	0.00
ANNUALIZED POUNDS =	5	0	5
ANNUALIZED TONS =	0.00	0.00	0.00
POUND/HR (AVG) =	0.00	0.00	0.00
MAXIMUM EMISSION RATE (#/HR) =			

Effective Diameter for a Horizontal Fixed Roof Tank
(From Supplement E of AP-42)

FGT Station 17
Lube Oil Storage Tank No. 2

Tank Measurements

Length of Tank (ft) - L	24
Actual Diameter of Tank (ft) - D	5

Calculated Values

Effective Tank Diameter (ft) - D_{eff}	12.4
Vapor Space Outage (ft) - H_{vo}	2.5

Equations:

$$D_{eff} = \text{SQRT}(L * D / 0.785)$$

Equation 1-5 of Chapter 12

$$H_{vo} = D / 2$$

Equation 1-6 of Chapter 12

FIXED ROOF TANK VOLATILE ORGANIC COMPOUND EMISSIONS (Rev. 6/90)

(C) COPYRIGHT 1990, PHOENIX ENGINEERING, INC.

CLIENT: Florida Gas Transmission

DATE: 05/14/93

LOCATION: Station 17

JOB NO:

CALCULATED USING AP-42, FOURTH EDITION SEP. 85, EQUATIONS 4.3-(1)&(2)

TANK PHYSICAL DATA

TANK IDENTIFICATION NUMBER	Lube Oil Rundown Tank #1	
EMISSION CONTROLS	None	
PERCENT EFFICIENCY		0 %
TANK PAINT COLOR	White	
TANK DIAMETER (FT), D		7.5
TANK HEIGHT (FT), H		4.0
PAINT FACTOR, FsubP		1.00
TANK CAPACITY (BBLs), VB		25
TANK CAPACITY (GALLONS), V		1050
ADJUSTMENT FACTOR FOR DIA., C		0.37

WEATHER DATA

	Gainsville	
AVG. DAILY TEMP. CHANGE (DEG F), DeltaT		20.0
STORAGE TEMP. (DEG. F)		68.8
AVG. ATM. PRESS. (PSIA), PsubA		14.7

PRODUCT PHYSICAL DATA

MATERIAL STORED	Lube Oil	
MOLECULAR WEIGHT (#/#MOLE) MsubV		190.00
VAPOR PRESS. AT STG. TEMP. (DEG. F), P		0.0019
PRODUCT FACTOR, KsubC (CRUDE 0.65, OTHER 1.0)		1.00

THROUGHPUT DATA

DAYS IN SERVICE, DsubS		365
VAPOR SPACE HEIGHT (FT), VH		2.00
TANK THROUGHPUT (BBLs FOR DAYS IN SERVICE), TT		11.9
FILLING RATE (BBLs/HR), FR		
NUMBER OF TURNS FOR DAYS IN SERVICE, N		0.48
TURNOVER FACTOR, KsubN		1.00

FIXED ROOF TANK BREATHING LOSS, # LsubB =

$$2.26 \times 10^{-2} * (M_{subV}) * (P / (P_{subA} - P)) \text{ EXP } 0.68 * (D) \text{ EXP } 1.73 * (VH) \text{ EXP } 0.51 * (\Delta T) \text{ EXP } 0.5 * (F_{subP}) * (C) * (K_{subC}) * D_{subS} / 365 * (100 - \% \text{eff}) / 100$$

FIXED ROOF TANK WORKING LOSS, # LsubW =

$$2.4 \text{ EXP } -05 * M_{subV} * P * V * N * K_{subN} * K_{subC} * (100 - \% \text{eff}) / 100$$

VOLATILE ORGANIC COMPOUND LOSSES		BREATHING	WORKING	TOTAL
POUNDS FOR DAYS SERVICE	=	1	0	1
TONS FOR DAYS SERVICE	=	0.00	0.00	0.00
ANNUALIZED POUNDS	=	1	0	1
ANNUALIZED TONS	=	0.00	0.00	0.00
POUND/HR (AVG)	=	0.00	0.00	0.00
MAXIMUM EMISSION RATE (#/HR)	=			

Effective Diameter for a Horizontal Fixed Roof Tank
(From Supplement E of AP-42)

FGT Station 17
Lube Oil Rundown No. 1

Tank Measurements

Length of Tank (ft) - L	11
Actual Diameter of Tank (ft) - D	4

Calculated Values

Effective Tank Diameter (ft) - D_{eff}	7.5
Vapor Space Outage (ft) - H_{vo}	2

Equations:

$D_{eff} = \text{SQRT}(L \cdot D / 0.785)$	Equation 1-5 of Chapter 12
$H_{vo} = D / 2$	Equation 1-6 of Chapter 12

FIXED ROOF TANK VOLATILE ORGANIC COMPOUND EMISSIONS (Rev. 6/90)

(C) COPYRIGHT 1990, PHOENIX ENGINEERING, INC.

CLIENT: Florida Gas Transmission

DATE: 04/27/93

LOCATION: Station 17

JOB NO:

CALCULATED USING AP-42, FOURTH EDITION SEP. 85, EQUATIONS 4.3-(1)&(2)

TANK PHYSICAL DATA

TANK IDENTIFICATION NUMBER	Waste Oil Tank 1	
EMISSION CONTROLS	None	
PERCENT EFFICIENCY		0 %
TANK PAINT COLOR	Black	
TANK DIAMETER (FT), D		7.9
TANK HEIGHT (FT), H		10.0
PAINT FACTOR, FsubP		1.58
TANK CAPACITY (BBLs), VB		90
TANK CAPACITY (GALLONS), V		3780
ADJUSTMENT FACTOR FOR DIA., C		0.41

WEATHER DATA

Gainsville

AVG. DAILY TEMP. CHANGE (DEG F), DeltaT	20.0
STORAGE TEMP. (DEG. F)	73.8
AVG. ATM. PRESS. (PSIA), PsubA	14.7

PRODUCT PHYSICAL DATA

MATERIAL STORED	Waste oil	
MOLECULAR WEIGHT (#/#MOLE) MsubV		190.00
VAPOR PRESS. AT STG. TEMP. (DEG. F), P		0.0019
PRODUCT FACTOR, KsubC (CRUDE 0.65, OTHER 1.0)		1.00

THROUGHPUT DATA

DAYS IN SERVICE, DsubS	365
VAPOR SPACE HEIGHT (FT), VH	5.00
TANK THROUGHPUT (BBLs FOR DAYS IN SERVICE), TT	85.70
FILLING RATE (BBLs/HR), FR	128.60
NUMBER OF TURNOVERS FOR DAYS IN SERVICE, N	1.0
TURNOVER FACTOR, KsubN	1.00

FIXED ROOF TANK BREATHING LOSS, # LsubB =

$$2.26 \times 10^{-2} * (M_{subV}) * (P / (P_{subA} - P)) \text{ EXP } 0.68 * (D) \text{ EXP } 1.73 * (VH) \text{ EXP } 0.51 * (\Delta T) \text{ EXP } 0.5 * (F_{subP}) * (C) * (K_{subC}) * D_{subS} / 365 * (100 - \% \text{eff}) / 100$$

FIXED ROOF TANK WORKING LOSS, # LsubW =

$$2.4 \text{ EXP } -05 * M_{subV} * P * V * N * K_{subN} * K_{subC} * (100 - \% \text{eff}) / 100$$

VOLATILE ORGANIC COMPOUND LOSSES	BREATHING	WORKING	TOTAL
POUNDS FOR DAYS SERVICE =	2	0	2
TONS FOR DAYS SERVICE =	0.00	0.00	0.00
ANNUALIZED POUNDS =	2	0	2
ANNUALIZED TONS =	0.00	0.00	0.00
POUND/HR (AVG) =	0.00	0.00	0.00
MAXIMUM EMISSION RATE (#/HR) =	0.00	0.05	0.05

Cleaning Machines Calculation Worksheet

Station 17 Silver Springs, FL

	Gal Solvent Used in 1991	Weighting Factor for Allocating Emissions	VOC Emissions (lb/yr)	VOC Emissions (Tons/yr)
Parts No. 1	210	0.618	309	0.15
Parts No. 2	90	0.265	132	0.07
Paint No. 1	40	0.118	59	0.03
Total	340	1.000	500	0.25

Notes:

Pounds of estimated makeup during
year for the 3 cleaning machines:

500

Assumption for air emissions calculations
is that all of the material requiring makeup
evaporated.

The total assumed emission is allocated
among the units based on the total
material used during the year (including
changed-out material).

Calculation of annual HC emissions from blowdowns
(for a typical station)

unmetered gas released (due to blowdowns)	300 Mscf/mo.
unmetered gas released (due to blowdowns)	3.6 MMscf/yr.
unmetered gas released (due to blowdowns) (@21.98 scf/lb)	0.16 MMLb/yr.
unmetered gas released (due to blowdowns) (@21.98 scf/lb)	81.89 TPY
VOCs released (due to blowdowns) (@2% VOCs)	1.64 TPY

Phase I Station Characteristics

05-Jun-92
CS17.WK1

Compressor Station: Number 17
 Name: Silver Springs
 County: Marion
 Nearest City: Silver Springs
 Compressor Supervisor: Leroy Coker
 Mailing Address: Box 337
 Silver Springs, Florida 32688-0337
 Telephone: 904-685-2421
 Latitude: 29-17-47
 Longitude: 81-50-08
 UTM Zone: 17
 UTM Easting: 418.84 km
 UTM Northing: 3,240.90 km
 Elevation (ft): 92

Phase I Engine Characteristics

	1	2	3	4
Engine Identification				
Permit Number				
Serial Number	7023	7022	7021	7020
Operating Time				
Hours/Day	24	24	24	24
Days/Week	7	7	7	7
Weeks/Year	52	52	52	52
Engine Type	Recip	Recip	Recip	Recip
Date of Installation	1966	1966	1966	1966
Engine Make	Cooper	Cooper	Cooper	Cooper
Engine Model	LS-8-SG	LS-8-SG	LS-8-SG	LS-8-SG
Horsepower Rating	2000	2000	2000	2000
Air Charging	Turbo.	Turbo.	Turbo.	Turbo.
Exhaust Temperature (F)	875	875	875	875
Mass Flow Rate (lbs/hr) (a)	21000	21000	21000	21000
Volumetric Flow Rate (acfm)	11760	11760	11760	11760
Volumetric Flow Rate (dscfm)	4279	4279	4279	4279
Exit Velocity (af/s)	154.5	154.5	154.5	154.5
Water Vapor Content (%)	8	8	8	8
Ave. Fuel Consumption (MMCF/Hr) (b)	0.0146	0.0146	0.0146	0.0146
Max. Fuel Consumption (MMCF/Hr) (b)	0.0146	0.0146	0.0146	0.0146
Specific Fuel Consump. (BTU/bhp-hr)	6200	6200	6200	6200
Maximum Heat Input (MMBTU/Hr)	12	12	12	12
Stack Height (ft)	28.17	28.17	28.17	28.17
Stack Diameter (in)	15.25	15.25	15.25	15.25
Stack to Building Offset (ft)	17.00	17.00	17.00	17.00
Building Height (ft) (c)	31.75			
Building Length (ft) (c)	155.00 191	← Same	← Same	← Same
Building Width (ft) (c)	55.00			

Phase I Fuel Characteristics

	N.G.	N.G.	N.G.	N.G.
Fuel Type	N.G.	N.G.	N.G.	N.G.
Heating Value (BTU/CF)	1030	1030	1030	1030
Heat Capacity (BTU/lb)	22637	22637	22637	22637
Density (lb/cubic ft)	0.0455	0.0455	0.0455	0.0455
Percent Sulfur (%) (d)	0.031	0.031	0.031	0.031
Percent Ash (%)	N/A	N/A	N/A	N/A

Phase I Emissions Rates by Engine for Station 17
Engine Identification

	1	2	3	4
Grams/BHP-Hour				
NOX	11.000	11.000	11.000	11.000
CO	1.400	1.400	1.400	1.400
NMHC	0.440	0.440	0.440	0.440
SO2 (e)	0.093	0.093	0.093	0.093
PM (f)	0.016	0.016	0.016	0.016
Pounds/Hour				
NOX	48.51	48.51	48.51	48.51
CO	6.17	6.17	6.17	6.17
NMHC	1.94	1.94	1.94	1.94
SO2	0.41	0.41	0.41	0.41
PM	0.07	0.07	0.07	0.07
Tons/Year				
NOX	212.47	212.47	212.47	212.47
CO	27.04	27.04	27.04	27.04
NMHC	8.50	8.50	8.50	8.50
SO2	1.79	1.79	1.79	1.79
PM	0.31	0.31	0.31	0.31

Phase I Emissions Rates for Total Station

Grams/BHP-Hour	
NOX	11.000
CO	1.400
NMHC	0.440
SO2	0.093
PM	0.016
Pounds/Hour	
NOX	194.04
CO	24.70
NMHC	7.76
SO2	1.63
PM	0.29
Tons/Year	
NOX	849.90
CO	108.17
NMHC	34.00
SO2	7.16
PM	1.25

SOURCE CLASSIFICATION WITH RESPECT TO PSD

MAJOR SOURCE

Notes:

- (a) Wet mass flow (@ 60 F, 14.7 psi).
- (b) Based on heating value of fuel gas.
- (c) All engines enclosed in one building.
- (d) Percent by weight.
- (e) Based on 10 grains/SCF.
- (f) Based AP-42 factor of 5 lbs/MMSCF.

Phase II Station Characteristics

05-Jun-92

CS17.WK1

Compressor Station: Number 17
 Name: Silver Springs
 County: Marion
 Nearest City: Silver Springs
 Compressor Supervisor: Leroy Coker
 Mailing Address: Box 337
 Silver Springs, Florida 32688-0337
 Telephone: 904-685-2421
 Latitude: 29-17-47
 Longitude: 81-50-08
 UTM Zone: 17
 UTM Easting: 418.84 km
 UTM Northing: 3,240.90 km
 Elevation (ft): 92

Phase II Engine Characteristics

Engine Identification	5
Permit Number	
Serial Number	412KVSRA226AP
Operating Time	
Hours/Day	24
Days/Week	7
Weeks/Year	52
Engine Type	Recip
Date of Installation	1991
Engine Make	Dresser--Rand
Engine Model	412--KVSRA
Horsepower Rating	2400
Air Charging	Turbo.
Exhaust Temperature (F)	695
Mass Flow Rate (lbs/hr) (a)	29622
Volumetric Flow Rate (acfm)	14355
Volumetric Flow Rate (dscfm)	6036
Exit Velocity (af/s)	143.23
Water Vapor Content (%)	8
Ave. Fuel Consumption (MMCF/Hr) (b)	0.0169
Max. Fuel Consumption (MMCF/Hr) (b)	0.0169
Specific Fuel Consump. (BTU/bhp-hr)	7300
Maximum Heat Input (MMBTU/Hr)	17.52
Stack Height (ft)	48.71
Stack Diameter (in)	17.5
Stack to Building Offset (ft)	17.00
Building Height (ft) (c)	31.75
Building Length (ft) (c)	495.00 191
Building Width (ft) (c)	55.00

Phase II Fuel Characteristics

Fuel Type	N.G.
Heating Value (BTU/CF)	1030
Heat Capacity (BTU/lb)	22637
Density (lb/cubic ft)	0.0455
Percent Sulfur (%) (d)	0.031
Percent Ash (%)	N/A

Phase II Emissions Rates by Engine for Station 17
Engine Identification

5

Grams/BHP-Hour		
	NOX	2.000
	CO	2.800
	NMHC	1.700
	SO2 (e)	0.090
	PM (f)	0.018
Pounds/Hour		
	NOX	10.58
	CO	14.82
	NMHC	9.00
	SO2	0.48
	PM	0.09
Tons/Year		
	NOX	46.36
	CO	64.90
	NMHC	39.40
	SO2	2.09
	PM	0.41

Phase II Emissions Rates for Total Station

Grams/BHP-Hour		
	NOX	8.923
	CO	1.723
	NMHC	0.731
	SO2	0.092
	PM	0.017
Pounds/Hour		
	NOX	204.62
	CO	39.51
	NMHC	16.76
	SO2	2.11
	PM	0.38
Tons/Year		
	NOX	896.25
	CO	173.07
	NMHC	73.40
	SO2	9.24
	PM	1.66

SOURCE CLASSIFICATION WITH RESPECT TO PSD

MAJOR SOURCE



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

June 29, 1993

VIA FEDERAL EXPRESS
(overnight delivery)

Mr. Clair Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

**RE: Request for Amendments and Extensions to Air
Construction Permits**

Permit No. AC57-188869
Florida Gas Transmission Company, Station 12 ←
Munson, Santa Rosa County, Florida

Permit No. AC67-189220
Florida Gas Transmission Company, Station 13
Caryville, Washington County, Florida

Permit No. AC20-189438
Florida Gas Transmission Company, Station 14
Quincy, Gadsden County, Florida

Permit No. AC62-189439
Florida Gas Transmission Company, Station 15
Perry, Taylor County, Florida

Permit No. AC04-189454
Florida Gas Transmission Company, Station 16
Brooker, Bradford County, Florida

Permit No. AC42-189455
Florida Gas Transmission Company, Station 17
Salt Springs, Marion County, Florida

Permit No. AC48-189456
Florida Gas Transmission Company, Station 18
Orlando, Orange County, Florida

Permit No. AC05-189665
Florida Gas Transmission Company, Station 19
Melbourne, Brevard County, Florida

Permit No. AC56-189457
Florida Gas Transmission Company, Station 20
Ft. Pierce, St. Lucie County, Florida

On May 27, 1993, Florida Gas Transmission Company (FGT) submitted Certificates of Completion of Construction to the appropriate district offices to obtain operating permits for

1993 JUN 30 11:09:19
RECEIVED
MAIL ROOM

*This file contains
all the attachments
related to this
correspondence.*

Department of Environmental Regulation

Routing and Transmittal Slip

To: (Name, Office, Location) ① ~~Jones~~ - file
② Pally

- 1. Preston Lewis, P.E. III
- 2. ARM BAR Permit
- 3. TLT
- 4.

Remarks:

RECEIVED
JUN 11 1993
Division of Air
Resources Management

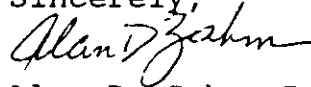
From: Alan Zahn

Date: 6/10/93
Phone:

Florida Gas Transmission Co.
Page Two

If you have any questions, please call John Turner at 407/894-7555
or write to the above address.


Sincerely,



Alan D. Zahm, P.E.
Supervisor, Permitting
Air Resources Management

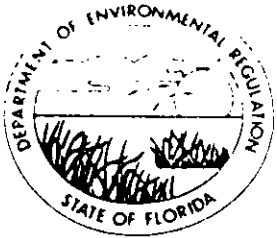
10 June 1993

Date

AZ/jt 

cc: Barry Andrews, P.E.
Preston Lewis, P.E.

DER Form 17-1.202(2)



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

February 12, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Alan Weatherford
Compliance Environmentalist
Florida Gas Transmission Company
P.O. Box 945100
Maitland, Florida 32794-5100

Dear Mr. Weatherford:

Re: Permits AC57-188869, AC67-189220, AC20-189438, AC62-189439,
AC04-189454, AC42-189455, AC48-189456, AC05-189665 and
AC56-189457; Permit Amendment Request

The Department is in receipt of your letter dated January 18, 1993, requesting an amendment of the specific condition regarding test method for measuring VOC emissions for each one of the above referenced permits. The Department has reviewed your request and has determined to change Specific Condition No. 10 for each one of the permits as follows:

Specific Condition No. 10:

FROM: Initial compliance with the volatile organic compound emission (VOC) limits will be demonstrated by EPA Method 25, thereafter, compliance with the VOC emission limits will be assumed, provided the CO allowable emission rate is achieved.

TO: Initial compliance with the volatile organic compound emission (VOC) limits will be demonstrated by EPA Method 25A, thereafter, compliance with the VOC emission limits will be assumed, provided the CO allowable emission rate is achieved.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within

14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Mr. Alan Weatherford
Florida Gas Transmission Company
Page 3

A copy of this letter shall be attached to the above mentioned permit and shall become a part of that permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/TH/plm

Attachment to be Incorporated:

Mr. Alan Weatherford's letter of December 7, 1992

cc: Ed Middleswart, NWD
Charles Collins, CD
Isidore Goldman, SED
Andy Kutyna, NED



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

Certified Mail

December 7 , 1992

Mr. Clair Fancy
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

RE: Request for Modification to Permits

Permit No. AC57-188869
Florida Gas Transmission Company, Station 12
Munson, Santa Rosa County, Florida

Permit No. AC67-189220
Florida Gas Transmission Company, Station 13
Caryville, Washington County, Florida

Permit No. AC20-189438
Florida Gas Transmission Company, Station 14
Quincy, Gadsden County, Florida

Permit No. AC62-189439
Florida Gas Transmission Company, Station 15
Perry, Taylor County, Florida

Permit No. AC04-189454
Florida Gas Transmission Company, Station 16
Brooker, Bradford County, Florida

Permit No. AC42-189455
Florida Gas Transmission Company, Station 17
Salt Springs, Marion County, Florida

Permit No. AC48-189456
Florida Gas Transmission Company, Station 18
Orlando, Orange County, Florida

Permit No. Ac05-189665
Florida Gas Transmission Company, Station 19
Melbourne, Brevard County, Florida

Permit No. AC56-189457
Florida Gas Transmission Company, Station 20
Ft. Pierce, St. Lucie County, Florida

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An **ENRON/SONAT** Affiliate

Division of Air
Resources Management

Mr. Clair Fancy
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December 7, 1992

Florida Gas Transmission Company (FGT) requests that the permits referenced above be modified as follows:

Modify Specific Condition 10 which currently reads

"Initial compliance with the volatile organic compound (VOC) emissions limits will be demonstrated by EPA Method 25, thereafter, compliance with the VOC emission limits will be assumed, provided the CO allowable emission rate is achieved."

so that it reads

"Initial compliance with the volatile organic compound (VOC) emissions limits will be demonstrated by EPA Method 25A, thereafter, compliance with the VOC emission limits will be assumed, provided the CO allowable emission rate is achieved."

FGT has supplied your office with evidence supporting our contention that the use of Method 25 to measure VOC emissions in compressor engines is questionable. We believe the evidence supports the use of Method 25A. Mr. Barry Andrews, ENSR Consulting & Engineering, has spoken to you about this on FGT's behalf.

Since no specific test method is listed for our source (i.e. NSPS or 17-2.700), we ask that this change be made through a simple permit modification.

Please call me at 407-875-5816 if you have any questions.

Sincerely,



Allan Weatherford
Compliance Environmentalist

bc
aw1207cf

cc: Chuck Truby
Raymond Young
Fred Griffin
Barry Andrews, ENSR

J. Wilson
C. Middleton