TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

APPLICANT

JEA
Northside Generating Station and St. Johns River Power Park (NGS/SJRPP)
Separations Technology, LLC (ST) Facility
Facility ID No. 0310045

PROJECT

Draft Permit No. 0310045-027-AC
Application for Minor Source Air Construction Permit
Combustion of Landfill Gas in the CFB Boiler Nos. 1 and 2
Landfill Gas-to-Energy

COUNTY

Duval County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

April 23, 2010

1. 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.

Facility Description and Location

The NGS/SJRPP/ST Facility is an existing power plant, which is categorized under Standard Industrial Classification Code No. 4911. The NGS/SJRPP/ST Facility is located in Duval County at 4377 Heckscher Drive in Jacksonville, Florida. The UTM coordinates of this facility are Zone 17, 446.90 kilometer (km) East, and 3359.150 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

JEA has requested to be allowed to burn 195 standard cubic feet per minute (scfm) of landfill gas in the Circulating Fluidized Bed Boiler (CFB) Nos. 1 and 2 (total).

Processing Schedule

08/10/2009	Received a concurrent minor source air pollution construction (AC) permit/Title V air operation permit revision application; incomplete.
09/23/2009	Requested additional information.
01/26/2010	Received response to additional information request.
02/10/2010 & 02/17/2010	Requested additional information.
02/25/2010	Received response to additional information request; application complete.

Relevant Documents

- JEA-NGS/SJRPP/ST, Air Permit Nos. 0310045-001-AV and 0310045-020-AV.
- North Landfill, Air Permit No. 0310340-005-AV.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NOx); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be

major with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

This proposed project is at an existing major stationary source with respect to PSD. Therefore, this proposed project's emissions are evaluated against the significant emission rates.

Air pollutant emissions from the combustion of landfill gas are expected to be the typical products of combustion, e.g., VOC, CO, NOx and PM/PM_{10}. One of the pollutants of concern which could trigger PSD is SO_2. Combustion of landfill gas with a sulfur content higher than the natural gas currently being burned results in an increase in SO_2 emissions. The applicant claims that there will be no changes to any other air pollutants. The following table summarizes potential emissions and PSD applicability for the project.

Table A - Summary of PSD Applicability Analysis

Pollutant			
	Increase	Significant Emission Rates (SER)	Subject to PSD?
CO	NA	100	No
NO_X	NA	40	No
PM	NA	25	No
PM_{10}	NA	15	No
SO_2	0.12	40	No
VOC	NA	40	No

"NA" refers to not applicable. SO_2 is shown here for informational purposes, see calculation and discussion below.

The total project emissions are not expected to exceed the PSD significant emissions rates; therefore, the project is not subject to PSD preconstruction review.

3. DEPARTMENT REVIEW

3.1 Present Situation - Combustion in Circulating Fluidized Bed Boiler (CFB) Nos. 1 and 2

The JEA NGS CFB boilers are circulating fluidized bed boilers. The JEA CFB Boiler Nos. 1 and 2 currently fire coal, petroleum coke, No. 2 fuel oil or natural gas or a combination thereof.

Currently, JEA is authorized to burn 100% landfill gas in NGS Boiler No. 3 (E.U. ID No. -003) and is also allowed to burn landfill gas in the limestone dryers (E.U. ID No. -033). Review of annual operating report (AOR) data from the Department's Air Resource Management System (ARMS) database indicates the following quantities of landfill gas were burned in the NGS Boiler No. 3, as shown in Table B.

Table B - Landfill Gas Burned in NGS Boiler No. 3

Year	Quantity, million ft^3/yr
2008	0
2007	13
2006	31

2005	97
2004	105
2003	144
2002	169
2001	168
2000	279
1999	175

After reviewing this data, the greatest quantity of landfill gas burned in the NGS Boiler No. 3 was in the year 2000 with 279 million ft^3, which was approximately 14% of the total heat input to the boiler. The quantity of landfill gas combusted in the boiler has decreased from the year 2000 to 2008.

3.2 Landfill Gas Generation and Emissions

Landfill Gas Collection and Control System

Landfill gas is typically collected with a system comprised of wells and piping then sent through headers to a flare. Figure 1 shows a typical landfill gas collection and control system with a flare.

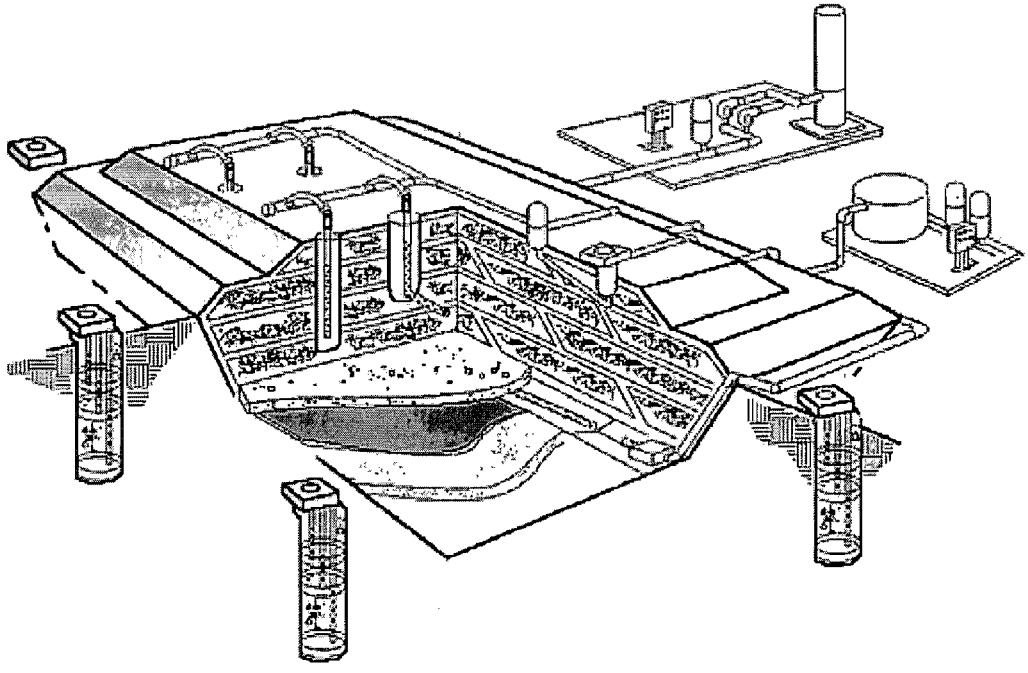

Figure 1 - Typical Landfill Gas Collection and Control System with a Flare.

Present Situation - Generation of Landfill Gas

Landfill gas is being generated from the adjacent North Landfill operated by the City of Jacksonville which is located directly north of the JEA NGS/SJRPP/ST power plant at 11405 Island Drive in Duval County. The landfill is permitted to operate under Air Permit No. 0310340-005-AV. The air permit for the landfill authorizes a flare with the capacity to burn 1,655 million ft^3 of landfill gas per year (3,150 acfm). When the landfill gas is flared it is simply burned; there is no energy recovery. As previously mentioned, the JEA NGS Boiler No. 3 is currently allowed to combust landfill gas. When JEA is unable to burn the landfill gas in the JEA Boiler No. 3 it is flared. Prior to the gas being sent to the JEA Boiler No. 3 it is sent to a treatment system located at the landfill.

The air permit, Permit No. 0310340-005-AV, for the landfill describes this treatment system in detail. The landfill gas treatment system located specifically at the Fuel Gas Compressor System Skid (FGCS) consists of the processes described below:

1. At the inlet a filtered vessel is used to stop particulates from entering the system.

Particulate is reduced to less than 10 microns.

2. A compressor which raises the gas pressure to send the gas down the pipeline.
3. A knockout vessel which filters the compressor oil out of the gas.
4. An Air X-Changer which cools the gas and produces condensate.
5. A knockout vessel to remove the condensate.
6. A heat exchanger which cools the gas further and produces condensate.

Review of AOR data from the Department's ARMS database indicates the following quantities of landfill gas were flared at the North Landfill, as shown in Table C.

Table C - Landfill Gas Flared at North Landfill

Year	Quantity, million ft^3/yr
2008	217
2007	207
2006	269
2005	231
2004	236
2003	228
2002	231
2001	221
2000	120
1999	680
1998	1,379

According to Department records, the flare at the North Landfill started operation in 1997. In reviewing this data, the greatest quantity of landfill gas flared was in the year 1998 with 1,379 million ft^3, which was approximately at 83% of the flare's capacity. The quantity of landfill gas being flared decreased from 680 million ft^3 in the year 1999 to 120 million ft^3 in the year 2000. Looking at the subsequent years, the landfill gas generation appears to have leveled off after 1999.

3.3 Proposed Project - Combustion of Landfill Gas in Circulating Fluidized Bed Boiler Nos. 1 and 2

JEA has requested to be allowed to burn 195 scfm landfill gas in the Circulating Fluidized Bed Boiler (CFB) Nos. 1 and 2 (total). Individually, this equates to about 100 scfm per boiler at a heat input of about 6 MMBtu/hr. This represents approximately 0.22% of the total maximum heat input to each boiler. The combustion of landfill gas in these boilers results in the benefit of generating electricity instead of flaring it. The JEA-NGS/SJRPP/ST facility could generate up to 1.31 MW of electricity from the combustion of 195 scfm of landfill gas in the CFB Nos. 1 and 2 (total).

The applicant requests no change to the currently applicable emission standards and limitations.

3.4 SO_2 Emissions from the Combustion of Landfill Gas

SO_2 is generated from the combustion of the landfill gas containing hydrogen sulfide (H_2S). To calculate SO_2 emissions, the quantity of landfill gas expected along with the expected H_2S content of the landfill gas is needed.

Future Landfill Gas Generation Estimates

JEA submitted information regarding projected (modeled) landfill gas generation from the North Landfill in the form of landfill gas generation curve. Figure 2 is the actual landfill gas generation curve that had been provided. The curve shows a peak gas generation in 1993 of about 1,100 scfm, which is equivalent to approximately 578 million ft^3. In 2010, the gas generation is estimated to be 775 scfm, which is equivalent to approximately 407 million ft^3. The landfill is projected to continue to generate gas until at least the year 2035. Table D shows some data points of interest from the landfill gas curve.

Comparing the landfill curve estimate to the actual flared quantity in 1998, the landfill curve estimates 975 scfm (equivalent to about 512 million ft^3). The actual quantity of gas burned was 1,379 million ft^3, which is greater than what is estimated by the curve, by a factor of 2 ½. Potential emissions were based on the landfill gas generation curve which is a landfill gas projection. When an actual gas generation is greater than what is projected, emissions could increase due to a larger quantity of landfill gas.

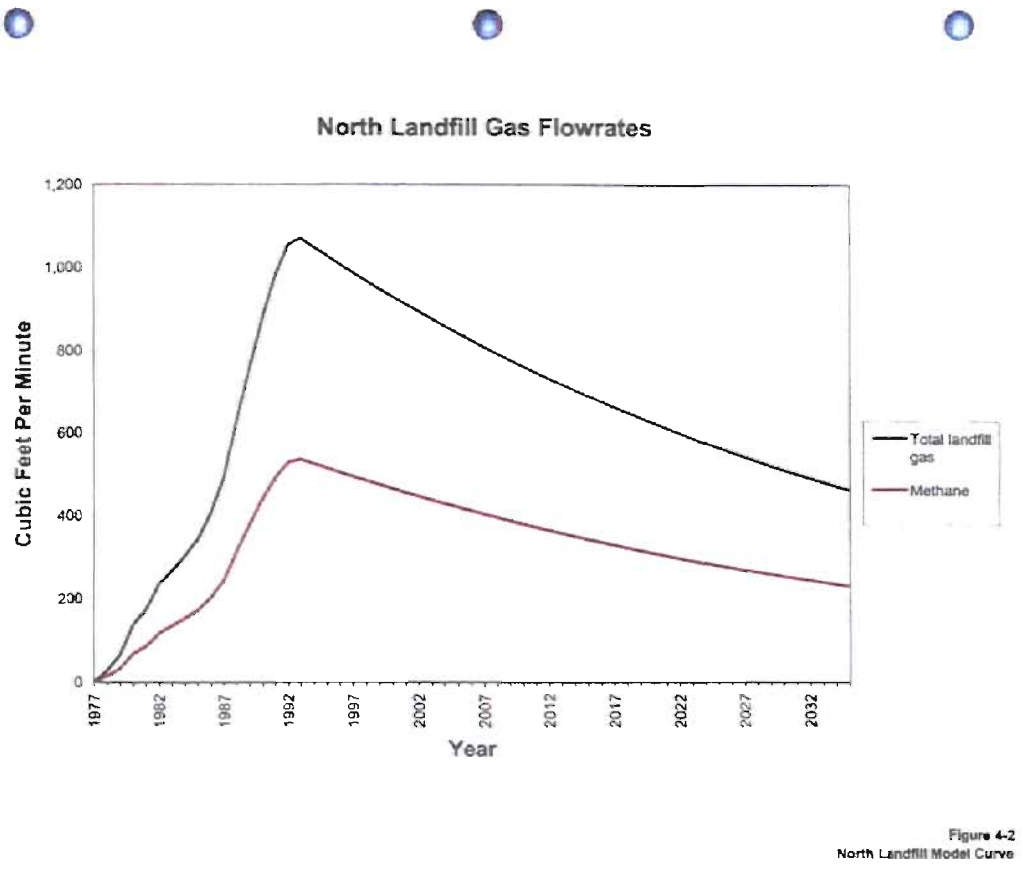

Figure 2 - Landfill Gas Generation Curve for the North Landfill

Table D - Landfill Gas Generation Curve, Data Points of Interest

Year	Estimated Quantity, scfm, from gas curve	Calculated Equivalent Quantity, million ft^3/yr
2035	475	250
2010	775	407
2008	800	420
2003	900	473
1999	950	499
1998	9750	512
1993 {peak gas generation}	1,100	578

The requested total landfill gas to be burned in the Circulating Fluidized Bed Boiler Nos. 1 and 2 as previously mentioned is 195 scfm. This represents about 25% of the quantity projected by the gas curve in 2010.

General Overview of H_2S Content of Landfill Gas

Hydrogen sulfide (H_2S) can be present at concentrations on the order of 10,000 parts per million by volume (ppmv) or 1% that must be considered from the standpoint of odor as well as potential emissions of PSD pollutants upon combustion.[1] An example of a landfill with a high H_2S content landfill gas is the Okeechobee Landfill (Facility ID No. 0930104) which contains approximately 5,800 ppmv of H_2S. Another landfill, the Central Landfill in Pompano Beach (Facility ID No. 0112094) was confirmed to have elevated H_2S levels up to 5,000 ppmv.[2] The AP-42 emission factor for H_2S is 35.5 ppmv (11/1998). The H_2S content of landfill gas is greater than 100 ppmv.[3] Some landfill sites containing high volumes of H_2S generating wastes like construction and demolition (C&D) and sewage sludge can result in up to 50,000 ppmv of H_2S in the landfill gas.[4] H_2S has a reported odor threshold ranging from approximately 0.0005 - 0.3 ppmvd.[5]

The generation of H_2S in landfill gas peaks within 6 months to 2 years and lasts for 10 years or more.[6] Therefore, both the contents and the age of the landfill matters in determining H_2S levels at a given point in time.

H_2S Content of Landfill Gas in the North Landfill Gas

The air permit does not indicate whether or not the landfill contains C&D debris. According to the landfill supervisor, the North Landfill does contain C&D debris.[7] The maximum sulfur content of the landfill gas is claimed to be 48.2 parts per million volume dry (ppmvd). The natural gas presently being combusted in the CFB boilers contains 34 ppmvd of H_2S. The difference in sulfur content is 14.2 ppmvd.

SO_2 Emissions Calculated

Uncontrolled SO_2 emissions can be theoretically calculated using the following equation:

$$[(Q\ ft^3/min) \times (\underline{x\ ppmvd}\ ft^3\ H_2S/1{,}000{,}000\ ft^3) \times (60\ min./hour) \times (8{,}760\ hrs/year) \times (lb\text{-}mol\ H_2S/379\ ft^3\ H_2S) \times (lb\text{-}mol\ SO_2/lb\text{-}mol\ H_2S) \times (64\ lb\ SO_2/lb\text{-}mol\ SO_2) \times (ton\ SO_2/2{,}000\ lb\ SO_2)] = TPY\ SO_2$$

Using this equation and the difference in sulfur content, an increase in SO_2 emissions can be theoretically calculated. Assuming no control efficiency from the presently installed and operational lime injection and dry absorber scrubber, uncontrolled emissions of SO_2 are calculated to be 0.12 TPY, with the data as summarized in

Table E.

Table E- Calculated SO_2 Emissions Increase

E.U. ID Nos.	H_2S content Natural gas, ppmvd	H_2S content landfill gas, ppmvd	x, H_2S content difference, ppmvd	Q, landfill gas flow rate to boilers, scfm	SO_2, TPY, Uncontrolled emissions
-026 NGS CFB Boiler No. 2 -027 NGS CFB Boiler No. 1	34	48.2	+14.2	195	+0.12

Using control efficiencies of 40% estimated from the lime injection and 90% estimated for the spray dryer absorber, actual emissions are calculated to be approximately 0.0072 TPY, which supports the applicant's claim of a negligible emissions increase.

Under this project request, JEA indicated that they would inject limestone into the CFB boiler beds or use the spray dryer absorber as necessary to maintain SO_2 emissions within permit limits at all times.

3.5 Federal Requirements

The CFB Boiler Nos.1 and 2 are regulated under NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-265; PSD-FL-265(A, B and C)]; and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; and, Compliance Assurance Monitoring (CAM); and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).

No additional federal requirements are applicable as a result of this project.

3.6 Requirements - Permits Required

The Department requires the owner or operator of any emissions unit to obtain an appropriate permit prior to beginning construction, modification, or initial or continued operation, unless exempted pursuant to Department rule or statute. The Department's rule for specifically when an air construction permit is required is found at Rule 62-210.300(1), F.A.C.

The Department has specific rules on when an air operation permit is required {see Rule 62-210.300(2), F.A.C.} and when activity is exempt from permitting {see Rules 62-210.300(3) and 62-4.040, F.A.C.}.

The proposed activity is not specifically exempted from permitting in Rules 62-210.300(3) or 62-4.040, F.A.C.

Air Construction Permit Required

The proposed activity involves physical changes and a change in the method of operation at the facility. A new gas line will be installed to deliver landfill gas to a lance above the existing above-bed burners in the CFB Boiler Nos. 1 and 2.

The proposed project may increase actual SO_2 emissions slightly as indicated above.

The Department therefore requires an air construction permit for the owner or operator to proceed with the proposed activity in accordance with Rule 62-210.300(1)(a), F.A.C.

Title V Air Operation Permit Required

This existing facility currently operates under a Title V air operation permit. A revision to the Title V air operation permit is required to allow the operation of the proposed activity.

3.7 Draft Permit Requirements

As previously stated, SO_2 emissions estimated in this project could be greater, up to a factor of 100 times higher, especially if H_2S generating wastes are in the landfill presently or in the future. Considering these factors, uncontrolled SO_2 emissions could be 30 TPY [0.12 TPY x 2.5 x 100 = 30 TPY]. Therefore, an increase in the quantity of landfill gas burned and/or a higher H_2S content could approach the PSD SER for SO_2, assuming no controls.

An initial and subsequent confirmation of the H_2S content of the landfill gas provides confirmation of the H_2S claim of 48.2 ppmvd relied upon in this application. On-site sampling had indicated an H_2S content of 48.2 ppmvd.

A restriction on the quantity of landfill gas combusted provides reasonable assurances that the SO_2 emissions will be much less than the PSD SER. A limitation on a heat input basis corresponds to other allowed methods of operation. As requested, the quantity of landfill gas allowed to burned is limited to 6 MMBtu/hr heat input. The landfill gas may be burned in combination with other authorized fuels provided the maximum heat input to each boiler is not exceeded.

As proposed by the applicant, a requirement to inject limestone into the CFB boiler beds or use the spray dryer absorber as necessary to maintain SO_2 emissions within permit limits as recorded by the continuous emissions monitoring system (CEMS) at all times is added to the permit.

The applicant indicated that there should be no affect on combustion in the CFB boilers. An initial compliance test for visible emissions (VE) is deemed acceptable to confirm no affect on combustion in the CFB Boiler Nos. 1 and 2.

4. 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. No air quality modeling analysis is required because the project does not result in a significant increase in emissions.

Mr. Scott M. Sheplak, P.E. is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting him by telephone at 850/921-9532 or by e-mail at scott.sheplak@dep.state.fl.us in the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

References

[1] Worldwide Web. Florida DEP Website: http://www.dep.state.fl.us/air/emission/construction/okeechobee/TECH382.pdf. Technical Evaluation and Preliminary Determination for Project No. PSD-FL-382/0930104-014- AC, Okeechobee Landfill, Inc. NSR/PSD Construction Permits and Waste-to-Energy, Landfills and Recycling links. Accessed February 12, 2010.

[2] DEP Trip Report dated February 21, 2007; site visit on January 10, 2007.

[3] Waste Age Magazine. *Odors & Landfill Gas from C&D Waste* by Brian E. Flynn; January 1998.

[4] Worldwide Web. Merichem Company Website: http://www.merichem.com/
Doug Heguy and Jean Bogner. Accessed on May 25, 2007.

[5] Worldwide Web. U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR) Website: http://www.atsdr.cdc.gov/toxprofiles/tp114-c4.pdf Toxicological Profile Information Sheet links. Accessed February 12, 2010.

[6] See Reference 2.

[7] Telephone conversation between Scott Sheplak, DEP and the City of Jacksonville North Landfill supervisor, Timothy Ghee on April 21, 2010.

Draft Permit

PERMITTEE

JEA
21 West Church Street
Jacksonville, Florida 32202

Authorized Representative:
Mr. James M. Chansler, P.E., D.P.A.
Chief Operating Officer

Draft Permit No. 0310045-027-AC
Permit Expires: April 30, 2011
Minor Air Construction Permit

NGS/SJRPP/ST Facility
Combustion of Landfill Gas in the
CFB Boiler Nos. 1 and 2

PROJECT

This is the final air construction permit, which authorizes the combustion of landfill gas in the CFB Boiler Nos. 1 and 2. The proposed work will be conducted at the existing NGS/SJRPP/ST Facility, which is a power plant categorized under Standard Industrial Classification No. 4911. The NGS/SJRPP/ST Facility is located in Duval County at 4377 Heckscher Drive in Jacksonville, Florida. The UTM coordinates of this facility are Zone 17, 446.90 kilometer (km) East, and 3359.150 km North.

This permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. [(if applicable) As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.]

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

(Draft)

Joseph Kahn, Director
Division of Air Resource Management

Date

JK/tlv/jkh/sms

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on _____ *(Draft)* _____ to the persons listed below.

Mr. James M. Chansler, P.E., D.P.A., Chief Operating Officer, JEA: chanjm@jea.com
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Ms. Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Draft)

_____ _____
(Clerk) (Date)

FACILITY DESCRIPTION

The Northside Generating Station (NGS) and St. Johns River Power Park (SJRPP) facilities and the Separations Technology, LLC (ST) facility are considered to be a single air emission "facility" for air permitting purposes.

NGS and SJRPP:

These operations consist of 5 boilers, NGS existing Boiler No. 3, which is a pre-NSPS boiler with a nominal rating of 564 MW and fired by natural gas, landfill gas, No. 6 residual fuel oil, and used oil; Boilers Nos. 1 and 2 and Auxiliary Boiler No. 1 have been permanently shutdown; NGS CFB Boilers Nos. 1 and 2, which are two coal, coal coated with latex, and petroleum coke fired circulating fluidized bed (CFB) boilers; SJRPP Boilers Nos. 1 and 2, which are two fossil fuel-fired steam generators (boilers) fired with pulverized coal, a blend of petroleum coke and coal, new No. 2 distillate fuel oil (startup and low-load operation), and "on-specification" used oil; and, four pre-NSPS distillate fuel oil fired combustion turbines with a nominal rating of 52.5 MWs each, NGS Nos. 3, 4, 5 and 6. Emissions from the NGS Boiler No. 3 are uncontrolled. Emissions from the NGS CTs Nos. 3, 4, 5 and 6, are controlled firing low sulfur fuel oil. Each NGS CFB boiler is equipped with a selective non-catalytic reduction (SNCR) system to reduce NOx emissions, limestone injection to reduce SO_2 emissions, fabric filter to reduce particulate matter (PM & PM_{10}) emissions, while maximizing combustion efficiency and minimizing NO_X formation to limit CO and VOC emissions. Emissions from the SJRPP Boilers Nos. 1 and 2 are controlled with an electrostatic precipitator, a limestone scrubber, and low-NOx burners. The SJRPP and NGS facilities also include coal, petroleum coke, limestone and fly ash handling activities, of which various control devices, control strategies, and control techniques are required.

The material handling and storage operations will process ash, limestone, coal, coal coated with latex, and petroleum coke to support the operation of CFB Boilers Nos. 1 and 2. Each materials handling and storage operation will employ one or more control strategies to limit emissions of particulate matter to meet specific emission limitations and/or visible emissions limits. The control strategies include the use of best operating/design practices, total or partial enclosures, conditioned materials, wet suppression, water sprays, and dust collection systems.

ST:

ST has constructed, owns and operates a fly ash processing system on a portion of leased property at the JEA SJRPP facility in Duval County, Florida. The purpose of the equipment is to remove the residual carbon and ammonia from the JEA SJRPP fly ash leaving a saleable product.

PROPOSED PROJECT

JEA has requested to be allowed to burn 195 standard cubic feet per minute (scfm) of landfill gas in the Circulating Fluidized Bed Boiler (CFB) Nos. 1 and 2 (total).

This project will modify the following emissions units.

Facility ID No. 0310045

E.U. ID No.	Emission Unit Description
-027	NGS: Circulating Fluidized Bed Boiler No. 1
-026	NGS: Circulating Fluidized Bed Boiler No. 2

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act (CAA).

- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

1. Permitting Authority: The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Quality Branch, Environmental Quality Division, Environmental and Compliance Department, City of Jacksonville, Jake Godbold City Hall Annex, 407 North Laura Street, Third Floor, Jacksonville, Florida 32202, Phone: 904/255-7201, Fax: 904/588-0518.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:
   (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. [Rule 62-212.400(12)(a), F.A.C.]
   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12)(b), F.A.C.]
   (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12)(c), F.A.C.]

8. Application for Title V Air Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is

required for regular operation of the permitted emissions unit. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. NGS: Circulating Fluidized Bed Boiler Nos. 1 and 2

This section of the permit addresses the following emissions units.

E.U. ID No.	Emission Unit Description
-027	NGS: Circulating Fluidized Bed Boiler No. 1
-026	NGS: Circulating Fluidized Bed Boiler No. 2

These emissions units are two coal, coal coated with latex, and petroleum coke fired circulating fluidized bed (CFB) boilers. These boilers are connected to the existing steam turbines of the retired Boilers Nos. 1 and 2 (297.5 MW each) as part of the repowering project authorized under air construction permit, No. 0310045-003-AC/PSD-FL-265. A dual-flued 495-foot stack was added to the facility for Repowered Units 1 and 2, along with solid fuel delivery and storage facilities, limestone preparation and storage facilities (including three limestone dryers), a lime silo, aqueous ammonia storage, polishing scrubbers, precipitators or baghouses, ash removal and storage facilities, and an electrical substation. The stack diameter is 15 feet, exit temperature is 144 degrees F and the actual stack gas flow rate is 700,000 acfm.

Each NGS CFB boiler is equipped with a selective non-catalytic reduction (SNCR) system to reduce NO_X emissions, limestone injection to reduce SO_2 emissions, fabric filter to reduce particulate matter (PM & PM_{10}) emissions, while maximizing combustion efficiency and minimizing NO_X formation to limit CO and VOC emissions.

CFB Boiler Nos. 1 and 2 began operation in February 2002 and May 2002, respectively.

JEA is allowed to burn 195 standard cubic feet per minute (scfm) of landfill gas in the CFB Boiler Nos. 1 and 2 (total). The 195 scfm of landfill gas is equivalent to a heat input of 6 MMBtu/hr. The landfill gas is being generated from the adjacent North Landfill (Facility ID No. 0310340) operated by the City of Jacksonville which is located directly north of the JEA NGS/SJRPP/ST power plant at 11405 Island Drive in Duval County. The maximum sulfur content, as H_2S, of the landfill gas is expected to be 48.2 parts per million volume dry (ppmvd). The natural gas presently being combusted in the CFB boilers typically contains 34 ppmvd of H_2S.

{Permitting notes: The emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(8)(b)2., F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-265; PSD-FL-265(A, B & C)]; and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; and, Compliance Assurance Monitoring (CAM), adopted and incorporated in Rule 62-204.800, F.A.C.; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

NEW AND PREVIOUS PERMIT SPECIFIC CONDITIONS

1. Source Obligation: A relaxation of the specific terms and conditions of this permit may subject the facility to a BACT determination. Specifically, an increase in the quantity of landfill gas burned and/or the H_2S content of the landfill gas could trigger a BACT determination. {See Rule 62-212.400(12)(a) - (c), F.A.C., Section 2., specific condition 7.} Any request to change the specific terms and conditions of this permit must be submitted to the Bureau of Air Regulation in the Division of Air Resource Management of the Florida Department of Environmental Protection. [Rule 62-212.400(12)(a) - (c) (Source Obligation), F.A.C.]

2. Other Permits: The specific terms and conditions of this permit are in addition to any other applicable standards. [Proposed by the Applicant in the Application; and, Rules 62-4.070(1) and (3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

EQUIPMENT

3. Equipment Name: The permittee is authorized to install a new gas line to deliver landfill gas to a lance above the existing above-bed burners in the CFB Boiler Nos. 1 and 2. [Application No. 0310045-027-AC.]

PERFORMANCE RESTRICTIONS

4. Permitted Capacity: The maximum operation heat input rates when firing landfill gas are as follows:

E.U. ID No.	MMBtu/hr Heat Input
-026	6
-027	6

Landfill gas may be burned in combination with other authorized fuels provided the maximum heat input to each boiler is not exceeded. [Rules 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

5. Authorized Fuel: The combustion of landfill gas in CFB Boiler Nos. 1 and 2 is an additional authorized method of operation. [Rule 62-213.410, F.A.C.; and, Application No. 0310045-027-AC.]

AIR POLLUTION CONTROL TECHNOLOGIES AND MEASURES

6. Sulfur Dioxide (SO_2): The permittee shall inject limestone into the CFB boiler beds or use the spray dryer absorber as necessary to maintain SO_2 emissions within permit limits as recorded by the continuous emissions monitoring system (CEMS) at all times. [Proposed by the Applicant in the Application; and, Rules 62-4.070(1) and (3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

EMISSION STANDARDS AND LIMITATIONS

7. Emission Standards and Limitations: When burning landfill gas, the permittee shall comply with the currently applicable emission standards and limitations to the CFB Boiler Nos. 1 and 2. [Application No. 0310045-027-AC.]

MONITORING AND TESTING REQUIREMENTS

8. Initial and Annual Monitoring - H_2S Content: The permittee shall perform an initial and annual confirmation of the H_2S content of the landfill gas relied upon in the permit application. Analysis of the H_2S content of the landfill gas fired shall be performed initially and annually thereafter. The initial analysis of the H_2S content shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initially burning landfill gas in each boiler. [Rules 62-4.070(1) and (3) (Reasonable Assurance) and 62-297.310(7)(a)1. and 4., F.A.C.]

9. Initial Compliance Test - Visible Emissions (VE): An initial VE test while burning landfill gas in each boiler shall be performed. The initial VE test shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initially burning landfill gas in each boiler. [Rules 62-4.070(1) and (3) (Reasonable Assurance) and 62-297.310(7)(a)1. and 4., F.A.C.]

10. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9., F.A.C.]

11. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. The GEM 2000 analyzer method shall be used to determine H_2S content. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

RECORDKEEPING AND REPORTING REQUIREMENTS

12. Fuel Consumption Records: The permittee shall maintain, for each boiler, a daily log of the amount of landfill gas fired and copies of fuel analyses containing information on the sulfur content, percent by weight, and heating values. [Rules 62-4.070(1) and (3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

13. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the quantity of landfill gas burned. [Rule 62-297.310(8), F.A.C.]

14. Annual Operating Report (AOR): The permittee shall submit the quantity of landfill gas combusted in each boiler with the AOR. [Rules 62-4.070(1) and (3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

15. H_2S Report: The permittee shall submit the results of each analysis of the H_2S content of the landfill gas, in units of ppmvd, in a report to the Compliance Authority. If the H_2S content exceeds 482 ppmvd, the permittee shall notify the Bureau of Air Regulation in the Division of Air Resource Management of the Florida Department of Environmental Protection. [Rules 62-4.070(1) and (3) (Reasonable Assurance) and 62-297.310(7)(a)1. and 4., F.A.C.]

Contents

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit
µg: microgram
AAQS: Ambient Air Quality Standard
acf: actual cubic feet
acfm: actual cubic feet per minute
ARMS: Air Resource Management System (Department's database)
BACT: best available control technology
bhp: brake horsepower
Btu: British thermal units
CAM: compliance assurance monitoring
CEMS: continuous emissions monitoring system
cfm: cubic feet per minute
CFR: Code of Federal Regulations

Citation Formats and Glossary of Common Terms

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F: fluoride

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

   a. Have access to and copy any records that must be kept under conditions of the permit;

   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of noncompliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
    a. Determination of Best Available Control Technology (not applicable);
    b. Determination of Prevention of Significant Deterioration (not applicable); and
    c. Compliance with New Source Performance Standards (not applicable).
14. The permittee shall comply with the following:
    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
    c. Records of monitoring information shall include:
        (a) The date, exact place, and time of sampling or measurements;
        (b) The person responsible for performing the sampling or measurements;
        (c) The dates analyses were performed;
        (d) The person responsible for performing the analyses;
        (e) The analytical techniques or methods used;
        (f) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. VOC or OS Emissions: No person shall 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), F.A.C.]

7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

11. Emissions Computation and Reporting:

    a. *Applicability.* This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance

with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions.* For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.

(a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

(b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

(3) Mass Balance Calculations.

(a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:

1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and

2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

(b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

(c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(4) Emission Factors.

a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

(5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

(6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

(7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

(8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units that require testing.

COMPLIANCE TESTING REQUIREMENTS

1. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]

3. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

4. Applicable Test Procedures:

   a. Required Sampling Time.

      (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

      (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

         (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

         (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

         (c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

   b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

d. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

e. Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1 CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calibration liquid in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

[Rule 62-297.310(4), F.A.C.]

5. Determination of Process Variables:

a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

   a. Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

   b. Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

   c. Sampling Ports.

      (1) All sampling ports shall have a minimum inside diameter of 3 inches.

      (2) The ports shall be capable of being sealed when not in use.

      (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

      (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

      (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

   d. Work Platforms.

      (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

      (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

      (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

      (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

   e. Access to Work Platform.

      (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

      (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.

   f. Electrical Power.

(1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

(2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

g. Sampling Equipment Support.

(1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

(a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

(b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

(c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

(2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.

(3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

7. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

a. General Compliance Testing.

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

(a) Did not operate; or

(b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,

4. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

(a) Visible emissions, if there is an applicable standard;

(b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

(c) c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.

(a) 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 shall 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.

(b) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

REPORTS

8. Test Reports:

a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.

(1) The type, location, and designation of the emissions unit tested.

(2) The facility at which the emissions unit is located.

(3) The owner or operator of the emissions unit.

(4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

(5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

(6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

(7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.

(8) The date, starting time and duration of each sampling run.

(9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.

(10) The number of points sampled and configuration and location of the sampling plane.

(11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

(12) The type, manufacturer and configuration of the sampling equipment used.

(13) Data related to the required calibration of the test equipment.

(14) Data on the identification, processing and weights of all filters used.

(15) Data on the types and amounts of any chemical solutions used.

(16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

(17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

(18) All measured and calculated data required to be determined by each applicable test procedure for each run.

(19) The detailed calculations for one run that relate the collected data to the calculated emission rate.

(20) The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.

(21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

MISCELLANEOUS

9. Stack and Duct: The terms stack and duct are used interchangeably in this rule. [Rule 62-297.310(9), F.A.C.]