Florida Department of Environmental Protection

TO:

Michael G. Cooke

THRU:

Trina Vielhauer

J. F. Koerner

FROM:

Michael P. Halpin

DATE:

December 12, 2005

SUBJECT:

Indiantown Cogeneration Plant, L.P.

DEP File No. 0850102-008-AC, PA 90-31

Attached is the final air construction permit for Indiantown Cogeneration Plant, located in Martin County. The applicant has requested permission to install two new, identically sized package boilers for the firing of natural gas or propane. Based upon the submitted information and other readily available documentation, reasonable assurance exists that Indiantown can accommodate this installation without exceeding any of the PSD thresholds (which would otherwise prompt a BACT Determination).

Notice was published in the Stuart/Port St. Lucie News on November 25, 2005. No comments were received, other than two minor comments from the applicant (which are accommodated within this issuance).

I recommend your approval.

Attachments

/mph

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this <u>Final Air Construction</u> <u>Permit</u> (including the <u>Final Notice of Permit</u> and the <u>Final Determination</u>) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on <u>IAIAA</u> to the person(s) listed:

Nicholas Laryea, Indiantown Cogeneration, L.P. *
Gary E. Willer, General Manager, Indiantown Cogeneration, L.P. *
William Cannon, P.E. Earth Tech, Inc.
Darrel Graziani, SED-DEP
Gregg Worley, EPA
John Bunyak, NPS

Clerk Stamp

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

(Date)

FINAL DETERMINATION INDIANTOWN COGENERATION, L.P. INDIANTOWN COGENERATION PLANT PSD PERMIT MODIFICATIONS

The Department distributed a Public Notice package on November 9, 2005 for the project allowing for the installation of two identically sized propane/natural gas-fired auxiliary (package) boilers. The subject facility is the Indiantown Cogeneration Plant located at 13303 SW Silver Fox Lane, Indiantown, Martin County. The Public Notice of Intent to Issue was published on November 25 in Stuart/Port St. Lucie News.

No comments were received from the public.

No comments were received from the Fish and Wildlife Service or the U.S. Environmental Protection Agency (EPA).

Two comments were received from the applicant and both comments were accepted and incorporated into the final permit. The first comment indicated that the facility is exempt from the acid rain provisions of Title IV, based upon 40CFR72.6(b)(5). Within the second comment, the applicant requested a correction to the SO₂ emission factor utilized in the application. The corrected emission factor increased the projects SO₂ emissions to 5.3 TPY, still well below PSD thresholds.

CONCLUSION

The final action is to issue the permit with the two changes identified above.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the Matter of an Application for Permit by:

Mr. Nicholas Laryea, Authorized Representative Indiantown Cogeneration, L.P. P.O. Box 1799
Indiantown, Florida 34956

Facility I.D. No. 0850102 DEP File No. 0850102-008-AC, PA90-31 Indiantown Cogeneration, L.P. Martin County

Enclosed is Permit Number 0850102-008-AC allowing for the installation of two new identically sized auxiliary boilers. The subject facility is the Indiantown Cogeneration Plant, located at 13303 SW Silver Fox Lane, Indiantown, Martin County. This permit is issued pursuant to Chapter 403, Florida Statutes and 40 CFR 52.21.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief Bureau of Air Regulation



Department of **Environmental Protection**

leb Bush Governor

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

Colleen M. Castille Secretary

PERMITTEE:

Indiantown Cogeneration, L.P. P.O. Box 1799 Indiantown, FL 34956

Authorized Representative:

Mr. Nicholas Laryea Indiantown Cogeneration, L.P. ARMS Permit No. 0850102-008-AC

Facility ID No.

0850102

SIC No. 4911

Expires: January 1, 2007

PROJECT AND LOCATION

The proposed project authorizes the installation of two natural gas (or propane) fired auxiliary boilers. The two identically sized packaged water-tube steam boilers have a combined rated maximum capacity of 350 MMBtu/hr.

The project will be located in Polk County at 13303 SW Silver Fox Lane. The UTM coordinates are Zone 17, 547.65 km E, 2990.70 km N.

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 install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix GC - Construction Permit General Conditions

Michael G. Cooke, Director

Division of Air Resource Management

Mile S. Looke

Date:

FACILITY DESCRIPTION

The Indiantown Cogeneration Plant is a cogeneration facility which generates electricity for sale and exports steam to the Caulkins Citrus Processing Plant. The facility includes one high-pressure pulverized coal main boiler (PC boiler) rated at 3,422 MMBtu/hour heat input, and has a nominal net electrical power output of approximately 330 megawatts (MW). It is permitted to fire natural gas, propane, or No. 2 fuel oil for startup, shutdown, or load changes.

Also included are two identical auxiliary boilers used for supplying steam to the steam host during times when the PC boiler is offline, as well as during PC boiler startup and shutdown periods. They have a combined total heat input rate of 358 MMBtu/hour, and are permitted to fire natural gas, propane, or No. 2 fuel oil. Steam produced by the auxiliary boilers is not used to generate electricity. In addition, the facility has a variety of ancillary equipment needed to support operations as a coal-fired cogeneration plant.

This project entails the addition of two additional auxiliary boilers. Although the completion of this project will result in the shutdown of the existing auxiliary boilers (based upon applicant submittals), corresponding emission reductions have not been considered herein.

NEW EMISSIONS UNIT

ARMS ID No.	EMISSION UNIT DESCRIPTION
007	(2) Victory Energy Model 23M Keystone packaged water-tube steam boilers with a combined maximum rated capacity of 350 MMBtu/hr when firing natural gas and 341 MMBtu/hr when firing propane.

REGULATORY CLASSIFICATION

HAPs: This facility is a major source of hazardous air pollutants (Title III).

Acid Rain: This facility is exempt from the acid rain provisions of the Clean Air Act (Title IV).

<u>Title V Major Source</u>: This facility is a Title V major source of air pollution.

<u>PSD Major Source</u>: The existing facility is classified as a PSD Major Source. Each pollutant with potential emissions greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a PSD review and Best Available Control Technology (BACT) determination. However, for this project, emissions of no pollutant are significant or subject to BACT standards, provided that the Emission Unit is operated as specified in this permit.

NSPS Sources: The auxiliary boilers specified in this permit are each subject to regulation under the New Source Performance Standards for Industrial Boilers, 40 CFR 60, Subpart Db.

<u>NESHAP Sources</u>: The auxiliary boilers specified in this permit are each subject to regulation under the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart DDDDD.

RELEVANT DOCUMENTS

- Permit application received on 10/20/05
- Application complete on 10/20/05

SECTION II. ADMINISTRATIVE REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

- 1. <u>Permitting Authority</u>: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114.
- 2. <u>Compliance Authority</u>: All documents related compliance activities such as reports, tests, and notifications should be submitted to the Air Resources Section of the Southeast District Office, Florida Department of Environmental Protection, 400 North Congress Avenue, West Palm Beach, Florida 33416-5425. The phone number is 561/681-6600.
- 3. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code.
- 4. <u>General Conditions</u>: The owner and operator are subject to, and shall operate under the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit 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 Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- 6. 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.]
- 7. <u>Modifications</u>: No emissions unit or facility subject to this permit shall be constructed or 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.]
- 8. Expiration: This air construction permit shall expire on January 1, 2007. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C]
- 9. <u>Title V Permit</u>: This permit authorizes construction and/or installation of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The owner or operator shall apply for a revision to the Title V operation permit at least ninety days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation, and a copy sent to the Department's Southeast District office. [Rules 62-4.030, 62-4.050, 62-4.220, and 62-213.420, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

This section of the permit addresses the following new emissions unit.

EU ID No.	EMISSION UNIT DESCRIPTION
007	(2) Victory Energy Model 23M Keystone packaged water-tube steam boilers with a combined maximum rated capacity of 350 MMBtu/hr when firing natural gas and 341 MMBtu/hr when firing propane.

APPLICABLE STANDARDS AND REGULATIONS

- 1. NSPS Requirements: The emission unit shall comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7)(b), F.A.C.
 - (a) Subpart A, General Provisions, including:
 - 40 CFR 60.7, Notification and Record Keeping
 - 40 CFR 60.8, Performance Tests
 - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
 - 40 CFR 60.12, Circumvention
 - 40 CFR 60.13, Monitoring Requirements
 - 40 CFR 60.19, General Notification and Reporting Requirements

(b) Subpart Db--Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units:

The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 MMBtu/hour).

2. <u>NESHAP Requirements</u>: The auxiliary boilers shall comply with all applicable requirements of 40 CFR 63, Subpart DDDDD.

PERFORMANCE RESTRICTIONS

- 3. <u>Auxiliary Boilers</u>: The permittee is authorized to install, tune, operate and maintain two new identically sized gas-fired package boilers (Victory Energy Model 23M Keystone). [Applicant Request]
- 4. <u>Permitted Capacity</u>: the combined heat input to the identically sized auxiliary boilers shall not exceed 350 MMBtu per hour while firing natural gas, or 341 MMBtu per hour while firing propane. [Design, Rule 62-210.200, F.A.C. (Definition PTE)]
- 5. Allowable Fuels: The identically sized auxiliary boilers shall be fired solely with pipeline-quality natural gas or liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835-03a, "Standard Specification for Liquid Petroleum Gases". [Applicant Request, Rule 62-210.200, F.A.C. (Definition PTE)]
- 6. <u>Hours of Operation:</u> The combined operation of the auxiliary boilers shall not exceed 5000 hours during any consecutive 12-month period. The permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the amount of natural gas as well as propane fired and the hours of operation for each auxiliary boiler. [Rule 62-210.200, F.A.C. (Definitions PTE), Rule 62-212.400 (2)(g), F.A.C. (PSD Avoidance)]
- 7. <u>Plant Operation Problems</u>: 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 the 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.]

EMISSIONS CONTROLS

- 8. <u>Unconfined Emissions of Particulate Matter</u>: [Rule 62-296.320(4)(c), F.A.C.]
 - (a) No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
 - (b) Any permit issued to a facility with emissions of unconfined particulate matter (PM) shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined PM.
 - (c) Reasonable precautions include the following:
 - Paving and maintenance of roads, parking areas and yards.
 - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - Landscaping or planting of vegetation.
 - Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - Confining abrasive blasting where possible.
 - Enclosure or covering of conveyor systems.
 - (d) In determining what constitutes reasonable precautions for a particular source, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.
- 9. <u>Air Pollution Control Equipment:</u> Each boiler shall be fitted with Low NO_X burners and Flue Gas Recirculation (FGR) so as to ensure that NO_X emissions do not exceed 0.040 lb/MMBtu. [Applicant request; Rule 62-212.400(2)(g), F.A.C.; PSD avoidance]
- 10. <u>Circumvention</u>: 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.]

EMISSIONS STANDARDS

11. <u>Summary</u>: The following table summarizes the emissions standards specified in this permit. Although these limits were not determined by BACT, they (along with other limitations described herein) form the basis for the Department's determination that PSD does not apply.

Pollutant	Emission limit	Annual Emissions (based upon a combined 5000 hrs/yr)
NO _X	0.040 lb/MMBtu	35 TPY
СО	0.040 lb/MMBtu	35 TPY
, VOC	0.70 lb/hr	1.8 TPY

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SO ₂	2.1 lb/hr	5.3 TPY
PM ₁₀	1.4 lb/hr	3.5 TPY

12. Carbon Monoxide (CO):

After an initial demonstration that the manufacturers guarantee (0.04 lb/MMBtu) can be met, CO emissions shall not exceed 400 ppm by volume corrected to 3 percent oxygen (30-day rolling average). Additionally, annual emissions of CO from this emission unit shall not exceed 35 TPY, based upon a 12-month rolling total.

The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the CEMS requirement of this permit. [40 CFR 63, Subpart DDDDD]

13. Nitrogen Oxides (NO_X):

 NO_X emissions from this emission unit shall not exceed 0.040 lb/MMBtu based upon a 30-day rolling average. Additionally, annual emissions of NO_X from this emission unit shall not exceed 35 TPY, based upon a 12-month rolling total.

The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with EPA Method 7 and the CEMS requirement of this permit. [Rule 62-212.400, F.A.C. (PSD avoidance)]

14. Particulate Matter (PM/PM10), Sulfuric Acid Mist (SAM) and Sulfur Dioxides (SO2)

- (a) Fuel Specifications. Emissions of PM, PM₁₀, SAM, and SO₂ shall be limited by the sole use of pipeline-quality natural gas and commercial propane meeting GPA Liquified Petroleum Gas Specifications. The permittee shall demonstrate compliance with the sulfur limits of each fuel by maintaining the records specified by this permit. The fuel specification is a work practice standard established as a means of complying with the small Boiler BACT for PM and SO₂ under Rule 62-296.406, F.A.C. and as a synthetic minor limit for SAM/SO₂ emissions [Rule 62-4.070(3), F.A.C., Rule 62-212.400(2)(g), F.A.C. (PSD Avoidance)].
- (b) General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20% opacity). The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1, F.A.C.]

15. Volatile Organic Compounds (VOC):

VOC emissions from this emission unit shall exceed neither 0.70 lb/hr nor 1.8 TPY, based upon a 12-month rolling total. The permittee shall demonstrate compliance with these standards by conducting an initial test in accordance with EPA Method 25A and the performance testing requirements of this permit. Thereafter, compliance with the CO limits established in this permit shall be sufficient to demonstrate PSD avoidance. [Rule 62-212.400, F.A.C., Rule 62-212.400(2)(g), F.A.C. (PSD avoidance)]

EXCESS EMISSIONS

16. 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. These emissions shall be included in the calculation of the

- 12-month rolling and 30-day rolling averages to demonstrate compliance with the continuous emissions standards except as provided within this permit. [Rule 62-210.700(4), F.A.C.]
- 17. Excess Emissions Allowed: Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:
 - (a) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for up to 2 hours in any 24-hour period. [Design; Rule 62-210.700(1) and (5), F.A.C.]
 - (b) During all startups, shutdowns, and malfunctions, the continuous emissions monitor (CEM) shall monitor and record emissions. For the purpose of complying with the CO standard as set forth in the applicable NESHAP, data averaging and the exclusion of CEMS data shall comply with the applicable portions of 40 CFR 63 Subpart DDDDD. For the purpose of ensuring compliance with the NO_X standard as set forth in the applicable NSPS, data averaging and the exclusion of CEMS data shall comply with the applicable portions of 40 CFR 60 Subpart Db. For the purpose of ensuring the avoidance of PSD and resulting BACT Standards for NO_X and CO, no data may be excluded from the calculation of TPY emissions. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report. [Design; Rules 62-210.700(1), (5), and 62-4.130, F.A.C.

EMISSIONS PERFORMANCE TESTING

- 18. <u>Sampling Facilities</u>: The permittee shall design the stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rules 62-4.070 and 62-204.800, F.A.C., and 40 CFR 60.40a(b)]
- 19. <u>Performance Test Methods</u>: Initial (I) and Annual (A) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
 - (a) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I, A);
 - (b) EPA Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources (I, A);
 - (c) EPA Method 7 Determination of Oxides of Nitrogen Oxide Emissions from Stationary Sources (I, A); and
 - (d) EPA Method 25A Determination of Volatile Organic Concentrations (I).
 - Annual RATA testing at 100% output may be utilized to satisfy the above annual requirements for CO and NO_X tests. No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure specified in Rule 62-297.620, F.A.C.
- 20. <u>Test Notification</u>: The permittee shall notify the Compliance Authority in writing at least 30 days prior to initial performance tests and at least 15 days prior to any other required tests. [40 CFR 60.7, 40 CFR 60.8 and Rule 62-297.310(7)(a)9., F.A.C.]
- 21. <u>Initial Tests Required</u>: Initial performance tests to demonstrate compliance with the emission standards specified in this permit shall be conducted within 60 days after achieving at least 90% of permitted capacity, but not later than 180 days after initial operation of the emission unit. Initial performance tests shall be conducted for CO, NO_X, VOC, and visible emissions from the emission unit. NO_X emissions data shall also be converted into units of the NSPS emissions standard. CO performance tests shall be conducted concurrently with all NO_X performance tests. [Rule 62-297.310(7)(a)1., F.A.C.]

- 22. <u>Annual Performance Tests</u>: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for CO, NO_X and visible emissions from the emission unit. If conducted at permitted capacity, CO and NO_X emissions data collected during the required annual CO and NO_X continuous monitor RATA may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). [Rule 62-297.310(7)(a)4., F.A.C.]
- 23. <u>Tests Prior to Permit Renewal</u>: Prior to renewing the air operation permit, the permittee shall conduct performance tests for CO, NO_X, VOC, and visible emissions from the emission unit. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants that are required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7)(a)3., F.A.C.]
- 24. Tests After Substantial Modifications: All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shakedown period of air pollution control equipment. Shakedown periods shall not exceed 100 days after re-starting the emission unit. [Rule 62-297.310(7)(a)4., F.A.C.]
- 25. <u>Calculation of Emission Rate</u>: 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.]

26. 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. [Rule 62-297.310(4)(a)1., F.A.C.]
 - 2. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]
- (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. [Rule 62-297.310(4)(b), F.A.C.]
- (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. [Rule 62-297.310(4)(d), F.A.C.]

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

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

CONTINUOUS MONITORING REQUIREMENTS

29. Continuous Emission Monitoring System: The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the exhaust stack of this emissions unit to measure and record the emissions of NO_X and CO from the emissions units, and the carbon dioxide (CO₂) content of the flue gas at the location where NO_X and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEM system shall be used to demonstrate compliance with the emission limits for NO_X and CO within this permit.

Compliance with the limits established herein for NO_X shall be based on 30-day and 12-month rolling totals starting at midnight of the first day of each calendar month. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the NO_X CEM system shall be expressed as lb/MMBtu and total pounds emitted.

For the CO emissions limits established herein, measurements shall be in parts per million corrected to 3% oxygen and be based on 30-day and 12-month rolling averages starting at midnight each calendar day. Each rolling average shall be calculated by adding each valid 24-hour block average from valid operating days within the calendar month.

Annual (12-month rolling) NO_X and CO emission totals shall be recalculated monthly and available on site for inspection purposes. Additionally, each year the facility shall submit all 12 months worth of calculations as part of the AOR submission.

30. <u>Certification</u>: The NO_X monitor shall be certified and operated in accordance with the following requirements. The NO_X monitor shall be certified pursuant to 40 CFR Part 60, Appendix B and shall be operated and maintained in accordance with the applicable requirements. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The RATA tests required for the NO_X monitor shall be performed using EPA Method 7 of Appendix A of 40 CFR 60.

The CO monitor and CO₂ monitor shall be certified and operated in accordance with the following requirements. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4. The CO₂ monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to the Department's Southeast District Office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, of Appendix A of 40 CFR 60. The Method 10 analysis shall be based

on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The RATA tests required for the CO₂ monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60.

31. NO_X/CO CEMS Data Requirements: NO_X, CO and CO₂ emissions data shall be recorded by the CEM system during episodes of startup, shutdown and malfunction. Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

A summary report of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to the Department's Southeast District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur. [Rules 62-4.070(3) and 62-212.400., F.A.C., and PSD avoidance]

COMPLIANCE DEMONSTRATIONS

32. <u>Records Retention</u>: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

REPORTS

- 33. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.].
- 34. Quarterly Excess Emissions Reports: If excess CO, NO_X or visible emissions occur due to malfunction, the permittee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format in 40 CFR 60.7, Subpart A, periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. Within thirty (30) days following each calendar quarter, the permittee shall submit a report on any periods of excess emissions that occurred during the previous calendar quarter to the Compliance Authority. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7]
- 35. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. This report shall include a summary of each of the prior year 12-month emission limitations, which are required for EU-007 by this permit. [Rule 62-210.370(2), F.A.C.]

GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. 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.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and 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 or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does 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.
- G.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.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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.
- G.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 a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a) Have access to and copy and records that must be kept under the 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.

- G.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 non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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.

- G.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 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.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.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code 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.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
 - a) Determination of Best Available Control Technology (X)
 - b) Determination of Prevention of Significant Deterioration (X); and
 - c) Compliance with New Source Performance Standards (X).
- G.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 or 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:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.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 that 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.